

Kerr-McGee Oil & Gas Onshore LP 1999 Broadway, Suite 3700 Denver, CO 80205

September 19, 2007

Mrs. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11 NBU 922-18I3S **T9S R22E** Section 18: SESE NWSE 1442' FSL, 2580' FEL (surface) SESE 1346' FSL, 726' FEL (bottom hole) Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18I3S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore and the W/2, W/2NE/4 and SE/4 of Section 18 (federal leases USA UTU-0359, USA-UTU 0359-A and USA-UTU 0461).

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

James C. Colligan III

Landman

Form 3160-3 (August 1999)

# **UNITED STATES** DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

5. Lease Serial No.

| UTU-046 | 1 |
|---------|---|
|---------|---|

| BUREAU OF LAND MA  | NAGEMENT              |                                      |   | UTU-0461                                 |                                       |
|--|-----------------------|--------------------------------------|---|--|---------------------------------------|
| APPLICATION FOR PERMIT T   | O DRILL OF            | R REENTER                            |   | 6. If Indian, Allottee of TRIBAL SURFACE |                                       |
| 1a. Type of Work: X DRILL R  | EENTER                |                                      |   | 7. If Unit or CA Agre                    | ement, Name and No.                   |
| In 1990 of Work 25 Stabb   | LLITTLE               |                                      |   | UNIT #89100890                           | 0 <b>A</b>                            |
|  |                       | _                                    |   | 8. Lease Name and W                      | lell No.                              |
| b. Type of Well: Oil Well Gas Well Other   | <u></u>               | Single Zone                          | Multiple Zone                           | NBU 922-1813                             | <u>S</u>                              |
| 2. Name of Operator KERR MCGEE OIL AND GAS ONSHORE LP  |                       |                                      |   |  | 047-398 44                            |
| 3A. Address<br>1368 SOUTH 1200 EAST VERNAL, UT 84078   | 3b. Phone N (435) 781 | o. (include area cod<br><b>-7024</b> | de)                                     | 10. Field and Pool, or NATURAL BUTT      |                                       |
| 4. Location of Well (Report location clearly and in accordance wi  | th any State requ     | uirements.*)                         |   | 11. Sec., T., R., M., or                 | r Blk, and Survey or Area             |
| At surface NW/SE 1442'FSL, 2580'FEL At proposed prod. Zone SE/SE 1346'FSL, 726'FEL                                   |                       |                                      |   | <br> SEC. 18, T9S, R2                    | )2E                                   |
| At proposed prod. Zone SE/SE 1346 FSL, 126 FEL  14. Distance in miles and direction from nearest town or post office | *                     |                                      |   | 12. County or Parish                     | 13. State                             |
| 16.6 +/- MILES FROM OURAY, UTAH  | ,                     |                                      |   | UINTAH                                   | UTAH                                  |
| 15. Distance from proposed* location to nearest  | 16. No. of A          | Acres in lease                       | 17. Spacing Unit de                     | dicated to this well                     |                                       |
| property or lease line, ft. (Also to nearest drig. unit line, if any)  | 601.96                |                                      | 40.00                                   |  |                                       |
| 18. Distance from proposed location* to nearest well, drilling, completed,  REFER T                                  | 19. Propose           | d Depth                              | 20. BLM/BIA Bond                        | No. on file                              | <del></del>                           |
| applied for, on this lease, ft. TOPO C   | 10,030'               |                                      | RLB0005239                              |  |                                       |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4861'GL  |                       | mate date work wil                   | l start*                                | 23. Estimated duration TO BE DETERM      |                                       |
|  | 24. A                 | ttachments                           |   |  |                                       |
| The following, completed in accordance with the requirements of O  | nshore Oil and (      | Gas Order No. 1, sh                  | all be attached to this                 | form:                                    |                                       |
| Well plat certified by a registered surveyor.  |                       | 1 4 Bond to cox                      | ver the operations un                   | less covered by an existir               | ng hond on file (see                  |
| Well plat collined by a registered surveyor.      A Drilling Plan.   |                       | Item 20 abo                          | •                                       | less covered by all existing             | ig bond on mo (see                    |
| 3. A Surface Use Plan (if the location is on National Forest System  | Lands, the            | 5. Operator cer                      | *                                       |  |                                       |
| SUPO shall be filed with the appropriate Forest Service Office.  | Danies, w.            | •                                    |   | on and/or plans as may be                | e required by the                     |
| got o stati or that the appropriate to the control of the  |                       | authorized o                         | -                                       | F  | , , , , , , , , , , , , , , , , , , , |
| 25. Signature  | ! Nar                 | ne (Printed/Typed)                   |   | ! I                                      | Date                                  |
| I hun Mille  | SH                    | EILA UPCHE                           | GO                                      |  | 11/16/2007                            |
| SENIOR LAND ADMINISPECIALIST   | 10                    |                                      |   |  |                                       |
| Approved by Signatura  |                       | ne (Printed/Typed)<br>BRADLEY        | - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | <br>                                     | Date<br>12-03-07                      |
| Title  | Off                   | ENVIRONMENTA                         | AL MANAGER                              |  |                                       |
| Application approval does not warrant or certify that the applicant l  | olds legal or eq      | uitable title to those               | rights in the subject l                 | ease which would entitle                 | the applicant to conduct              |
| operations thereon.  |                       |                                      |   |  |                                       |
| Conditions of approval, if any, are attached.  |                       | ·- <u>·</u>                          |   |  |                                       |
| Title 18 U.S.C. Section 1001and Title 43 U.S.C. Section 1212, mal  |                       |                                      |   | ke to any department or                  | agency of the United                  |
| States any false, fictitious or fraudulent statements or representation  | is as to any matt     | er within its jurisdi                | ction.                                  |  |                                       |

\*(Instructions on reverse)

Surf 629537X 44322814 -109,481801 BHU

630103X

44322434

40.032458

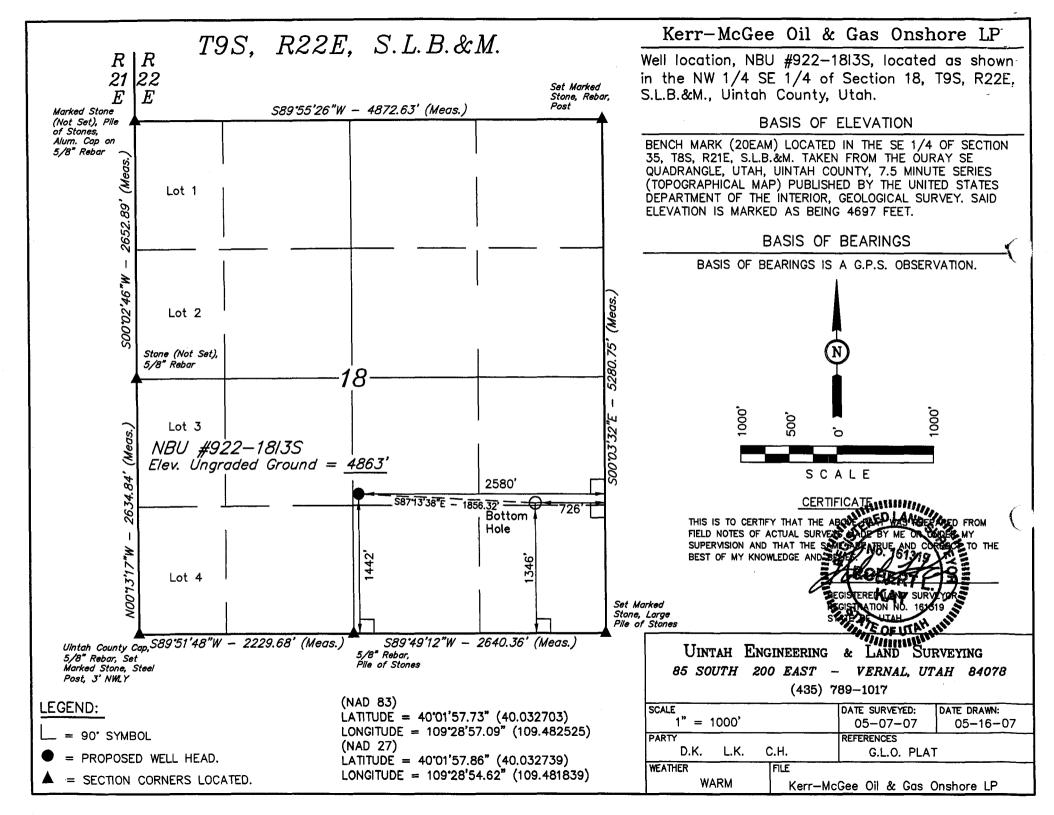
-109.475180

Federal Approval of this Action is Necessary

RECEIVED

NOV 2 0 2007

DIV. OF OIL, GAS & MINING



# NBU 922-18I3S NW/SE Sec. 18, T9S, R22E UINTAH COUNTY, UTAH UTU-0461

# **ONSHORE ORDER NO. 1**

# DRILLING PROGRAM

# 1. Estimated Tops of Important Geologic Markers:

| <u>Formation</u>        | <u>Depth</u> |
|-------------------------|--------------|
| Uinta                   | 0- Surface   |
| Green River             | 1728'        |
| Top of Birds Nest Water | 1998'        |
| Mahogany                | 2340'        |
| Wasatch                 | 4938'        |
| Mesaverde               | 7592'        |
| MVU2                    | 8573'        |
| MVL1                    | 9069'        |
| TVD                     | 9650'        |
| TD (MD)                 | 10,030'      |

# 2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

| Substance      | <u>Formation</u>        | <u>Depth</u> |
|----------------|-------------------------|--------------|
|                | Green River             | 1728'        |
|                | Top of Birds Nest Water | 1998'        |
|                | Mahogany                | 2340'        |
| Gas            | Wasatch                 | 4938'        |
| Gas            | Mesaverde               | 7592'        |
| Gas            | MVU2                    | 8573'        |
| Gas            | MVL1                    | 9069'        |
| Water          | N/A                     |              |
| Other Minerals | N/A                     |              |

# 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

# 4. Proposed Casing & Cementing Program:

Please see the Natural Buttes Unit SOP.

# 5. <u>Drilling Fluids Program</u>:

Please see the Natural Buttes Unit SOP.

# 6. Evaluation Program:

Please see the Natural Buttes Unit SOP.

# 7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,030' TD, approximately equals 6219 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4012 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

# 8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

# 9. <u>Variances:</u>

Please see Natural Buttes Unit SOP.

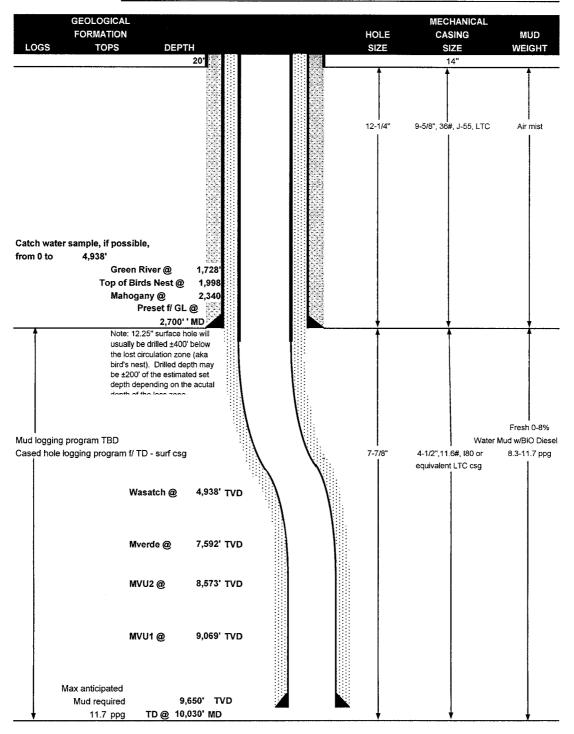
# 10. Other Information:

Please see Natural Buttes Unit SOP.



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

KERR-McGEE OIL & GAS ONSHORE LP COMPANY NAME DATE November 16, 2007 WELL NAME **NBU 922-1813S** 10,030' MD TD 9,650' TVD FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 4,861' GL KB 4,876' SURFACE LOCATION NW/SE SEC. 18, T9S, R22E 1442'FSL, 2580'FEL Latitude: 40.032703 Longitude: 109.482525 BTM HOLE LOCATION SE/SE SEC.18, T9S, R22E 1346'FSL, 726'FEL Wasatch/Mesaverde OBJECTIVE ZONE(S) ADDITIONAL INFO Regulatory Agencies: TRIBAL SURFACE, BLM MINERALS, UDOGM, Tri-County Health Dept.





# KERR-McGEE OIL & GAS ONSHORE LP

### DRILLING PROGRAM

### CASING PROGRAM

|            |                     |    |       |       |       |      |                | 1                            | DESIGN FACTO | ORS     |
|------------|---------------------|----|-------|-------|-------|------|----------------|------------------------------|--------------|---------|
|            | SIZE                | IN | TERV  | AL    | WT.   | GR.  | CPLG.          | BURST                        | COLLAPSE     | TENSION |
| CONDUCTOR  | 14"                 |    | 0-40' |       |       |      |                |                              |              |         |
|            | 1844.1              |    |       |       |       |      | a constitution | 3520                         | 2020         | 453000  |
| SURFACE    | 9-5/8"              | 0  | to    | 2700  | 36.00 | J-55 | . LTC          | 0.90                         | 1.60         | 5.93    |
|            | Parities of the     |    |       |       |       |      |                | 7780                         | 6350         | 201000  |
| PRODUCTION | 4-1/2"              | 0  | to    | 10030 | 11.60 | 08-1 | LTC            | 2.00                         | 1.04         | 1.98    |
|            | 51.54 (Sal Year was |    |       |       |       |      |                | and the second second second |              |         |
|            |                     |    |       |       |       |      |                |                              |              |         |

<sup>1)</sup> Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

0.0 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

3896 psi

# **CEMENT PROGRAM**

|                 | FT. OF FILL  | DESCRIPTION                             | SACKS                                  | EXCESS  | WEIGHT                                 | YIELD  |
|-----------------|--|---|--|---|--|--|
| SURFACE LEAD    | 500  | Premium cmt + 2% CaCl                   | 215                                    | 60%   | 15.60                                  | 1.18   |
| Option 1        | Programme Commence of the Comm | + .25 pps flocele                       | ************************************** | 15/5-75-  | TO STATE OF THE STATE OF THE STATE OF  | INGRES IN THE RESERVE OF THE RESERVE |
| TOP OUT CMT (1) | 200  | 20 gals sodium silicate + Premium cmt   | 50                                     | WINEST TREE STATE OF THE STATE | 15.60                                  | 1.18   |
|                 |  | + 2% CaCl + .25 pps flocele             | arm massa, Colon                       |   |  | SEC.   |
| TOP OUT CMT (2) | as required  | Premium cmt + 2% CaCl                   | as req.                                |   | 15.60                                  | 1.18   |
| SURFACE         | , Mary Color (1985), and a province<br>of the color colors   | NOTE: If well will circulate water to s | surface, o                             | otion 2 will  | be utilized                            | Splittermoner comment  |
| Option 2 LEAD   | 1500   | 65/35 Poz + 6% Gel + 10 pps gilsonite   | 360                                    | 35%   | 12.60                                  | 1.81   |
|                 | Pagathanananan ora s   | + 25 pps Flocele + 3% salt BWOW         |  | 27.542.2842.255.355<br>26.8846.255.655.6  | Marchael Charles                       | CONTRACTOR CAPTURE STUDIES CHAPTURE OF   |
| TAIL            | 500  | Premium cmt + 2% CaCl                   | 180                                    | 35%   | 15.60                                  | 1.18   |
|                 | The state of the second st | + .25 pps flocele                       |  |   | AND THE PROPERTY.                      | ida jagna ila jagnan ja kalani kana.<br>Nama kana  |
| TOP OUT CMT     | as required  | Premium cmt + 2% CaCl                   | as req.                                | 1120025 80-122-200-200-0  | 15.60                                  | 1.18   |
|                 | A BASA GARAGANA  |   |  | SPECIAL PROPERTY OF   |  | 58.00.00.000.000.000<br>68.00.000.000.000.000  |
| PRODUCTION LEAD | 7,090'   | Premium Lite II + 3% KCI + 0.25 pps     | 770                                    | 60%   | 11.00                                  | 3.38   |
|                 | Elifabethickeringsbager  | celloflake + 5 pps gilsonite + 10% gel  | ted state of active paid               | Alexandria de la Compaña<br>Alexandria de la Compaña  | at the art of the second of the second |  |
|                 | 54.1 046.4001  | + 0.5% extender                         |  |   |  |  |
|                 | Milita de como   |   | 2019-00-1953                           | deputate malara   | isvieroivseemaa                        | SPR ARMAGANA SPECIAL   |
| TAIL            | 2,940'   | 50/50 Poz/G + 10% salt + 2% gel         | 830                                    | 60%   | 14.30                                  | 1.31   |
|                 |  | +.1% R-3                                | en our religions.                      | ośrękietostyruos:   | pality approximation of the            |  |

<sup>\*</sup>Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

# **FLOAT EQUIPMENT & CENTRALIZERS**

| SURFACE    | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring   |
|------------|---|
|            | centralizers. Thread lock guide shoe.   |
| а          |   |
| PRODUCTION | Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers. |
|            |   |

### **ADDITIONAL INFORMATION**

|  | Fest casing head to 750 psi after installing. | Test surface casing to 1,500 psi prior to drilling out. |
|--|---|---|
|--|---|---|

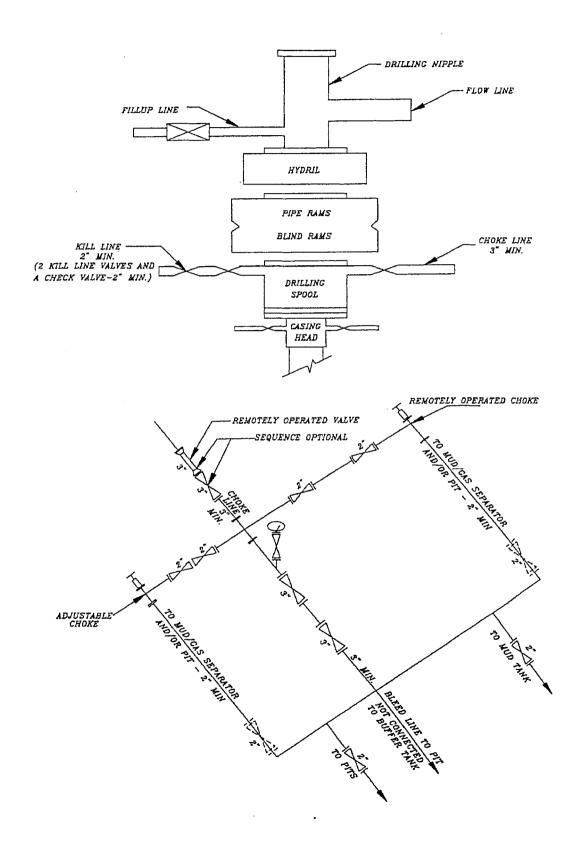
BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves. Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

| DIOP | IOLCO | Sui veys ev | ery zooc | . Wax | muni all | owat | ne noie an | gie is o | uegrees. |  |
|------|-------|-------------|----------|-------|----------|------|------------|----------|----------|--|
|      |       |             |          |       |          |      |            |          |          |  |
|      |       |             |          |       |          |      |            |          |          |  |

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

| DRILLING ENGINEER:       |             | DATE: |  |
|--------------------------|-------------|-------|--|
|                          | Brad Laney  | -     |  |
| DRILLING SUPERINTENDENT: |             | DATE: |  |
|                          | Randy Bayne |       |  |

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM





# **Drilling Services**

# **Proposal**



# **ANADARKO - KERR McGEE**

NBU 922-1813S

UINTAH COUNTY, UTAH

WELL FILE: PLAN 1

DATE: SEPTEMBER 24, 2007

Weatherford International, Ltd.

15710 John F. Kennedy Bivd Houston, Texas 77032 USA +1.281.260.1300 Main +1.281.260.4730 Fax www.weatherford.com

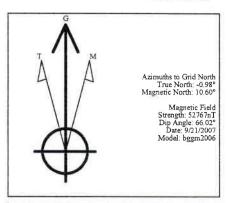




### ANADARKO KERR MCGEE OIL & GAS NBU 922-18I3S UINTAH COUNTY, UTAH



# Weatherford



|   |        |         |        |      | TAILS   | ECTION DE | S       |       |       |          |     |
|---|--------|---------|--------|------|---------|-----------|---------|-------|-------|----------|-----|
| 9 | Target | VSec    | TFace  | Dleg | +E/-W   | ÷N/-S     | TVD     | Azi   | Inc   | MD       | Sec |
|   |        | 0.00    | 0.00   | 0.00 | 0.00    | 0.00      | 0.00    | 91,99 | 0.00  | 0.00     | 1   |
|   |        | 0.00    | 91.99  | 0.00 | 0.00    | 0.00      | 300.00  | 91.99 | 0.00  | 300.00   | 2   |
|   |        | 58.03   | 91.99  | 1.50 | 58,00   | -2.01     | 963.29  | 91.99 | 10.00 | 966.67   | 3   |
|   |        | 364.26  | 0.00   | 0.00 | 364.04  | -12.63    | 2700.00 | 91.99 | 10.00 | 2730_17  | 4   |
|   |        | 374.68  | 0.00   | 0.00 | 374.45  | -12.99    | 2759 09 | 91.99 | 10.00 | 2790 17  | 5   |
|   |        | 646.91  | 0.00   | 2.50 | 646,52  | -22.44    | 3507,03 | 91.99 | 30.00 | 3590.17  | 6   |
|   |        | 1345 07 | 0.00   | 0.00 | 1344.26 | -46 65    | 4716.29 | 91.99 | 30.00 | 4986.50  | 7   |
|   |        | 1856.82 | 180.00 | 1.50 | 1855,70 | -64 40    | 6626,15 | 91,99 | 0.00  | 6986.50  | 8   |
|   | PBHL   | 1856 82 | 0.00   | 0.00 | 1855.70 | -64.40    | 9670.00 | 91.99 | 0.00  | 10030.35 | 9   |

|       |       |       |             | WELL DETAILS |               |                |      |
|-------|-------|-------|-------------|--------------|---------------|----------------|------|
| Name  | +N/-S | ÷E/-W | Northing    | Easting      | Latitude      | Longitude      | Slot |
| 18I3S | 0.00  | 0.00  | 14541570.70 | 2065403.80   | 40°01'57.690N | 109°28'54.522W | N/A  |

|     |         | CASINO  | G DETAILS |      |  |
|-----|---------|---------|-----------|------|--|
| No. | TVD     | MD      | Name      | Size |  |
| 1   | 2700.00 | 2730_17 | 9 5/8"    | 9.62 |  |
|     |         |         |           |      |  |

### FORMATION TOP DETAILS No. TVDPath MDPath Formation 5237.92 WASATCH 7952.35 MESAVERDE 4938.00 7592 00

### FIELD DETAILS

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

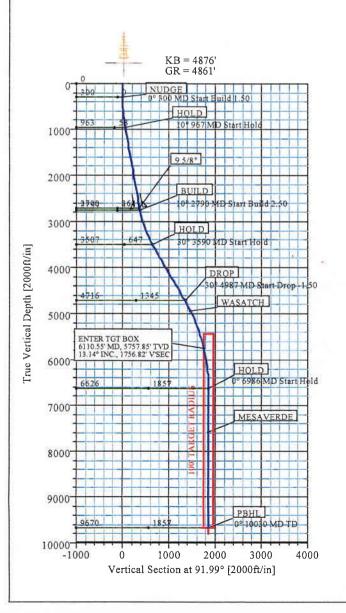
Universal Transverse Mercator (USfeet) NAD27 (Clarke 1866) UTM Zone 12, North 114W to 108W Geodetic System: Ellipsoid: Zone:

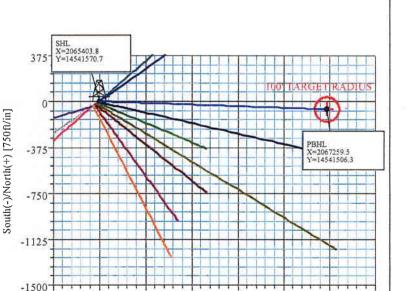
LEGEND

Magnetic Model: bggm2006

System Datum: Mean Sea Level Local North: Grid North

18JJS (1) 18JJS (1) 18NZAS (1) 18NZCS (1) 18NZCS (1) 18OJDS (1) 18OJDS (1) 18OJDS (1) 18PJS (1) 18PJS (1) Plan #1 18JJS





750

West(-)/East(+) [750ft/in]

1125

Plan: Plan #1 1813S (1813S/1)

1500

Created By: R. JOYNER

375

-375

Date: 9/28/2007

1875

2250



Company: Anadarko-Kerr-McGee Field:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

NBU 922-1813S PAD IJNOP Site:

Well: 18135 Wellpath: 1

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Co-ordinate(NE) Reference:

Site: NBU 922-18I3S PAD IJNOP, Grid Nort

SITE 4876.0

Well (0.00N,0.00E,91.99Azi) Minimum Curvature

Db: Sybase

Plan:

Date Composed:

Date: 9/28/2007

9/21/2007

Time: 08:21:46

Plan #1 18I3S

Version:

Principal:

Tied-to:

From Surface

Field:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Map System:Universal Transverse Mercator (USfeet)

Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level

Map Zone: Coordinate System: UTM Zone 12, North 114W to 108W

Site Centre

Geomagnetic Model:

bggm2006

Site:

NBU 922-1813S PAD IJNOP

1442 FSL, 2580 FEL - SEC18 T9S R22E

Site Position: From:

Northing: 14541570.70 ft Easting: 2065403.80 ft Latitude: Longitude:

40 1 57.690 N 109 28

54.522 W

Position Uncertainty: Ground Level:

0.00 ft 4861.00 ft North Reference: Grid Convergence:

Grid 0.98 deg

Well:

18I3S

Northing: 14541570.70 ft 2065403.80 ft Slot Name: Latitude: Longitude:

57.690 N 40 28 54.522 W

+E/-WPosition Uncertainty:

0.00 ft 0.00 ft 0.00 ft

Drilled From:

Surface 0.00 ft

Current Datum: Magnetic Data:

Wellpath: 1

Well Position:

9/21/2007

0.00

Height 4876.00 ft

Tie-on Depth: Above System Datum: Declination:

Mean Sea Level 11.57 deg 66.02 deg

Field Strength: 52767 nT Vertical Section: Depth From (TVD) fŧ

+N/-S

+N/-S ft 0.00

Mag Dip Angle: +E/-W ft

Direction deg

0.00 91.99

### Plan Section Information

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>deg/100f | Build<br>t deg/100f | Turn<br>t deg/100ft | TFO<br>deg | Target |
|----------|-------------|-------------|-----------|-------------|-------------|-----------------|---------------------|---------------------|------------|--------|
| 0.00     | 0.00        | 91.99       | 0.00      | 0.00        | 0.00        | 0.00            | 0.00                | 0.00                | 0.00       |        |
| 300.00   | 0.00        | 91.99       | 300.00    | 0.00        | 0.00        | 0.00            | 0.00                | 0.00                | 91.99      |        |
| 966.67   | 10.00       | 91.99       | 963.29    | -2.01       | 58.00       | 1.50            | 1.50                | 0.00                | 91.99      |        |
| 2730.17  | 10.00       | 91.99       | 2700.00   | -12.63      | . 364.04    | 0.00            | 0.00                | 0.00                | 0.00       |        |
| 2790.17  | 10.00       | 91.99       | 2759.09   | -12.99      | 374.45      | 0.00            | 0.00                | 0.00                | 0.00       |        |
| 3590.17  | 30.00       | 91.99       | 3507.03   | -22.44      | 646.52      | 2.50            | 2.50                | 0.00                | 0.00       |        |
| 4986.50  | 30.00       | 91.99       | 4716.29   | -46.65      | 1344.26     | 0.00            | 0.00                | 0.00                | 0.00       |        |
| 6986.50  | 0.00        | 91.99       | 6626.15   | -64.40      | 1855.70     | 1.50            | -1.50               | 0.00                | 180.00     |        |
| 10030.35 | 0.00        | 91.99       | 9670.00   | -64.40      | 1855.70     | 0.00            | 0.00                | 0.00                | 0.00       | PBHL   |

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft  | MapE<br>ft | Comment |
|----------|-------------|-------------|-----------|-----------|-----------|----------|------------------|-------------|------------|---------|
| 300.00   | 0.00        | 91.99       | 300.00    | 0.00      | 0.00      | 0.00     | 0.00             | 14541570.70 | 2065403.80 | NUDGE   |
| 400.00   | 1.50        | 91.99       | 399.99    | -0.05     | 1.31      | 1.31     | 1.50             | 14541570.65 | 2065405.11 |         |
| 500.00   | 3.00        | 91.99       | 499.91    | -0.18     | 5.23      | 5.23     | 1.50             | 14541570.52 | 2065409.03 |         |
| 600.00   | 4.50        | 91.99       | 599.69    | -0.41     | 11.77     | 11.77    | 1.50             | 14541570.29 | 2065415.57 |         |
| 700.00   | 6.00        | 91.99       | 699.27    | -0.73     | 20.91     | 20.92    | 1.50             | 14541569.97 | 2065424.71 |         |
| 800.00   | 7.50        | 91.99       | 798.57    | -1.13     | 32.66     | 32.68    | 1.50             | 14541569.57 | 2065436.46 |         |
| 900.00   | 9.00        | 91.99       | 897.54    | -1.63     | 47.00     | 47.03    | 1.50             | 14541569.07 | 2065450.80 |         |
| 966.67   | 10.00       | 91.99       | 963.29    | -2.01     | 58.00     | 58.03    | 1.50             | 14541568.69 | 2065461.80 | HOLD    |
| 1000.00  | 10.00       | 91.99       | 996.11    | -2.21     | 63.78     | 63.82    | 0.00             | 14541568.49 | 2065467.58 |         |
| 1100.00  | 10.00       | 91.99       | 1094.59   | -2.82     | 81.13     | 81.18    | 0.00             | 14541567.88 | 2065484.93 |         |
| 1200.00  | 10.00       | 91.99       | 1193.08   | -3.42     | 98.49     | 98.55    | 0.00             | 14541567.28 | 2065502.29 |         |
| 1300.00  | 10.00       | 91.99       | 1291.56   | -4.02     | 115.84    | 115.91   | 0.00             | 14541566.68 | 2065519.64 |         |
| 1400.00  | 10.00       | 91.99       | 1390.04   | -4.62     | 133.20    | 133.28   | 0.00             | 14541566.08 | 2065537.00 |         |



Company: Anadarko-Kerr-McGee
Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Site: NBU 922-18I3S PAD IJNOP

Well: 18135

Wellpath:

Date: 9/28/2007

Co-ordinate(NE) Reference:

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Time: 08:21:46

Site: NBU 922-1813S PAD IJNOP, Grid Nort

SITE 4876.0

Well (0.00N,0.00E,91.99Azi)

Minimum Curvature Db: Sybase

| Map  | Survey  |       |       |         |        |         |         |      |             |            | A REPORTED TO  |
|--|---------|-------|-------|---------|--------|---------|---------|------|-------------|------------|----------------|
| 1600.00   10.00   91.99   1687.00   -6.83   167.91   168.01   0.00   14541694.27   2065571.71   1700.00   10.00   91.99   1685.48   -6.43   165.26   120.74   0.00   14541693.67   2065560.64   1900.00   10.00   91.99   1682.44   -7.63   219.97   220.10   0.00   14541693.67   2065606.41   1900.00   10.00   91.99   1682.44   -7.63   219.97   220.10   0.00   14541693.67   2065606.41   2200.00   10.00   91.99   2079.40   -8.84   254.68   254.83   0.00   14541692.48   2065654.112   2100.00   10.00   91.99   2177.88   9.44   272.00   272.00   272.00   14541692.46   2065654.112   2200.00   10.00   91.99   2177.88   9.44   272.00   272.00   272.00   14541691.28   2065655.83   2300.00   10.00   91.99   2274.84   10.55   2065.40   2200.00   10.00   91.99   2274.84   10.55   2065.40   2200.00   10.00   91.99   2274.84   10.55   2065.40   224.29   0.00   14541659.68   20656578.69   2250.00   10.00   91.99   2274.84   10.55   2065.40   224.29   0.00   14541658.85   2065772.90   2260.00   10.00   91.99   2270.29   12.24   3341.45   341.65   304.65   0.00   14541658.85   2065772.90   2260.00   10.00   91.99   2270.00   12.23   364.04   364.26   0.00   14541658.85   2065762.60   2790.17   10.00   91.99   2770.00   12.23   364.04   364.26   0.00   14541658.85   2065762.60   2790.17   10.00   91.99   2769.09   11.25   324.40   32.00   32.50   14541658.85   2065762.60   26576.78   2600.00   10.25   91.99   2768.76   13.05   376.18   376.41   2.50   14541658.65   2065778.25   BUILD   2000.00   12.55   91.99   2768.76   13.05   376.81   376.41   2.50   14541656.95   2065778.25   BUILD   2000.00   12.55   91.99   2768.76   13.05   376.81   376.41   2.50   14541656.95   2065879.90   2765.76   276.00   277.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.00   275.55   275.   |         |       |       |         |        |         |         |      |             |            | Comment        |
| 1700.00 10.00 91.99 1685.48  | 1500.00 |       | 91.99 |         |        |         |         | 0.00 |             | 2065554.35 |                |
| 1800.00 10.00 91.99 1882.44 7.63 20.91 97 20.00 14641683.07 2066623.77 2000.00 10.00 91.99 1882.44 7.63 219.97 220.00 10.00 14.641683.07 2066623.77 2000.00 10.00 91.99 2079.40 8.84 2254.68 2264.80 206.81 4541581.68 2066658.48 2000 14541581.68 2066658.48 2000 14541581.68 2066658.48 2000 10.00 91.99 2079.40 10.00 91.90 2079.40 | 1600.00 | 10.00 | 91.99 | 1587.00 | -5.83  | 167.91  | 168.01  | 0.00 | 14541564.87 | 2065571.71 |                |
| 1800.00 10.00 91.99 1882.44 - 7.63 20.261 202.74 0.00 14641683.07 2066623.77 2000.00 10.00 91.99 1882.44 - 7.63 21.97 200.00 10.00 14641683.07 2066623.77 2000.00 10.00 91.99 2079.40 8.84 254.68 254.88 254.80 0.00 145415861.86 2066658.48 2300.00 14.00 91.99 2079.40 1.00 14.00 19.00 91.99 2079.40 1.00 14.00 19.00 91.99 2079.40 1.00 14.00 19.00 91.99 2079.40 1.00 19.00 91.99 2079.50 1.00 14.00 19.00 91.99 2079.50 1.00 14.00 19.00 91.99 2079.50 1.00 14.00 19.00 91.99 2079.50 1.00 14.00 19.00 91.99 2079.50 1.00 14.00 19.00 91.99 2079.50 1.00 14.00 19.00 91.99 2079.50 1.00 14.00 19.00 91.99 2079.50 1.12.5 324.10 324.29 0.00 14.541560.66 2065693.19 1.00 14.541560.00 19.00 91.99 2079.50 1.12.5 324.10 324.29 0.00 14.541560.66 2065693.19 1.00 14.541560.00 19.00 91.90 2079.50 1.12.5 324.10 324.29 0.00 14.541560.60 2065767.50 1.00 19.00 91.90 2079.50 1.12.5 324.10 324.29 0.00 14.541560.60 2065767.50 1.00 19.00 91.90 2079.50 1.12.5 324.10 324.29 0.00 14.541560.00 15.5576.25 2065767.50 1.00 19.00 91.90 2079.50 1.12.5 324.10 324.29 0.00 14.541560.00 14.541560.00 15.00 19.00 91.90 2070.00 1.20 19.00 2070.00 1.20 19.90 2070.00 1.20 19.00 2070.00 12.70 19.90 2070.0 | 1700.00 | 10.00 | 91 99 | 1685 48 | -6 43  | 185 26  | 185.37  | 0.00 | 14541564 27 | 2065589.06 |                |
| 1900.00   10.00   91.99   188.02   -8.24   -7.63   219.97   220.10   0.00   14541562.46   2056563.17   |         |       |       |         |        |         |         |      |             |            |                |
| 2000.00 10.00 91.99 1099 0797.40 -8.84 237.32 237.47 0.00 14541561.86 2065661.2 2100.00 10.00 91.99 2079.40 -8.84 2254.68 254.86 20.00 14541561.86 2065658.48 2300.00 10.00 91.99 2376.84 -10.56 30.07.47 30.00 14541561.82 2065657.83 2300.00 10.00 91.99 2374.84 -10.55 30.07.47 30.00 10.00 10.00 91.99 2374.84 -10.55 30.07.47 30.63 3 0.00 14541560.66 2065693.19 2500.00 10.00 91.99 2471.81 -11.85 324.10 324.29 0.00 14541558.85 205577.04 2500.00 10.00 91.99 2471.81 -11.85 324.10 324.29 0.00 14541558.85 205577.50 10.00 10.00 91.99 2471.81 -11.85 324.10 324.29 0.00 14541558.85 20.00 10.00 91.99 2471.81 -11.85 324.10 324.29 0.00 14541558.85 20.00 10.00 91.99 2471.81 -11.85 324.10 324.29 0.00 14541558.85 20.00 10.00 91.99 2471.81 -11.85 324.10 324.29 0.00 14541558.85 20.00 10.00 91.99 2471.81 -11.85 324.10 324.29 0.00 14541558.85 20.00 10.00 91.99 2471.81 -11.85 34.14 5341.65 30.00 14541558.85 20.00 10.00 91.99 2471.81 -12.99 371.45 374.83 0.00 14541558.77 2055767.85 80 10.00 10.00 91.99 2470.00 -12.63 304.04 384.28 0.00 14541558.70 205576.85 200.00 10.00 91.99 2686.75 -13.75 396.10 396.33 2.50 14541567.55 200.00 91.90 200.00 12.75 91.99 2066.75 -13.75 396.10 396.33 2.50 14541565.15 200.00 12.75 91.99 2066.75 -15.57 44.86 44.00 44.00 44.1567.65 200.00 91.00 91.99 3059.65 -15.57 44.86 44.86 44.86 12.50 14541565.13 200.00 91.00 91.99 3059.65 -15.57 44.86 44.86 44.86 12.50 14541565.13 200.00 91.00 91.99 3059.05 -15.57 44.86 44.86 44.86 12.50 14541565.13 200.00 91.00 91.99 3472.33 -17.97 51.77 51.82 0.00 14541545.90 2066582.44 300.00 20.25 91.99 3388.88 -19.38 558.42 558.76 2.50 1454156.91 2.00 1454156.00 2065884.97 3300.00 22.75 91.99 3388.88 -19.38 558.42 558.76 2.50 1454156.91 2.00 1454156.00 2065882.44 300.00 30.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 300.00 91.99 428.49 7.34.20 10.00 14541525.55 2006605.00 2006055.14 400.00 30.00 91.9 |         |       |       |         |        |         |         |      |             |            |                |
| 200.00 10.00 91.99 2079.40 -8.84 254.88 254.83 0.00 14541561.86 2656568.88   2200.00 10.00 91.99 2177.88 -10.04 259.39 289.56 0.00 14541560.66 20565693.19   2400.00 10.00 91.99 2478.38 -10.04 259.39 289.56 0.00 14541560.05 2056576.83   2500.00 10.00 91.99 2478.38 -11.25 324.10 324.29 0.00 14541560.05 2056770.64   2500.00 10.00 91.99 2478.38 -11.25 324.10 324.29 0.00 14541568.05 2056776.59   2500.00 10.00 91.99 2670.29 -12.45 356.80 369.02 0.00 14541568.85 2065762.60   2700.00 10.00 91.99 2670.29 -12.63 364.04 364.26 0.00 14541568.67 2056767.60   256776.24   2500.00 10.00 91.99 2700.00 -12.63 364.04 364.26 0.00 14541568.77 1 2056778.26   256778.26   256779.99 2769.70 -13.05 376.18 376.41 2.50 14541567.71 2056778.26   256778.26   256779.99 2769.00 10.25 91.99 2769.00 -13.05 376.18 376.41 2.50 14541567.71 2056778.26   256779.89 2500.00 12.75 91.99 2660.05 -13.75 396.10 396.33 2.50 14541569.95 2056789.99   25679.30 2500.00 12.75 91.99 3660.05 -15.75 396.10 396.33 2.50 14541565.95 2056884.09   25679.30 2500.00 12.75 91.99 3154.20 16.70 448.64 449.91 2.50 14541555.13 20568624.06 3300.00 22.75 91.99 3154.20 16.70 448.16 449.91 2.50 14541557.73 205691.58 3400.00 22.75 91.99 3428.07 -2.93 603.01 603.37 2.50 14541569.27 2056800.68   3500.00 30.00 91.99 3688.75 -2.60 8751.37 51.78 518.10 2.50 14541569.32 2056905.22 250 3700.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.23   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.23   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.22   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.22   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.23   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.23   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.23   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51.37 51.20 0.00 14541569.30 2056905.23   4000.00 30.00 91.99 3688.75 -2.60 8751.37 51 |         |       |       |         |        |         |         |      |             |            |                |
| 2300.00 10.00 91.99 2276.36 -10.04 289.39 289.56 0.00 1454150.66 2055893.19 2400.00 10.00 91.99 2374.84 -10.65 306.74 306.93 0.00 1454150.66 2055779.05 20500.00 10.00 91.99 2571.81 -11.85 324.10 324.29 0.00 14541559.45 2055779.05 20500.00 10.00 91.99 2571.81 -11.85 324.10 324.29 0.00 14541559.45 2055779.05 20500.00 10.00 91.99 2571.81 -11.85 324.10 324.29 0.00 14541558.25 205578.25 2057745.25 2700.00 10.00 91.99 2570.00 -12.63 364.04 364.26 0.00 14541558.27 2055778.25 205778.25 205770.00 10.00 91.99 2750.00 -12.63 364.04 364.26 0.00 14541557.07 2055778.25 205779.98 2000.00 10.25 91.99 2750.00 -12.63 364.04 364.26 0.00 14541557.65 2055778.25 205779.98 2000.00 10.25 91.99 2566.75 -13.75 396.10 396.10 396.33 2.50 14541557.65 2055779.98 2000.00 10.25 91.99 2666.75 -13.75 396.10 396.10 396.33 2.50 14541556.12 205579.98 205079.99 3000.00 15.25 91.99 3154.20 -16.70 448.64 449.91 2.50 14541556.12 205589.90 3000.00 15.25 91.99 3154.20 -16.70 448.64 449.91 2.50 14541556.12 2055884.97 3300.00 22.75 91.99 3345.26 -16.70 448.64 449.91 2.50 14541552.73 2055824.46 3300.00 22.75 91.99 3345.26 -16.70 481.17 481.10 250 14541552.73 2055824.53 3400.00 22.75 91.99 3345.26 -19.35 58.42 585.76 2.50 14541552.73 2055824.53 3400.00 22.75 91.99 3345.26 -19.35 58.42 585.76 2.50 14541552.73 2055821.58 3400.00 30.00 91.99 30516.54 -22.61 66.143 661.82 0.00 14541548.26 205605.32 400.00 30.00 91.99 30516.54 -22.61 66.143 661.82 0.00 14541548.26 2056050.32 400.00 30.00 91.99 30516.54 -22.61 66.143 661.43 661.20 0.00 14541548.26 2056050.32 400.00 30.00 91.99 30516.56 -31.25 91.00 20.00 1454154.28 9 206605.31 400.00 30.00 91.99 30516.56 -31.25 91.25 91.00 20.00 1454154.28 9 206605.51 400.00 30.00 91.99 30516.56 -31.25 91.25 91.00 20.00 1454153.22 2056505.32 400.00 30.00 91.99 30516.56 -31.25 91.00 20.00 1454153.22 2056505.32 400.00 30.00 91.99 40551.6 -31.35 91.25 91.00 20.00 1454153.22 2056505.32 400.00 30.00 91.99 40551.6 -31.25 91 |         |       |       |         |        |         |         |      |             |            |                |
| 2300.00 10.00 91.99 2276.36 -10.04 289.39 289.56 0.00 14541560.66 2055893.19 2400.00 10.00 91.99 2374.84 -10.65 306.74 306.93 0.00 14541569.65 2055779.05 20500.00 10.00 91.99 2571.81 -11.85 324.10 324.29 0.00 14541559.45 2055779.05 20500.00 10.00 91.99 2571.81 -11.85 324.10 324.29 0.00 14541559.45 2055779.05 20500.00 10.00 91.99 2571.81 -11.85 324.10 324.29 0.00 14541558.25 205578.25 205778.25 2730.17 10.00 91.99 2759.09 -12.99 374.45 374.86 0.00 14541558.27 2055778.25 BUILD 2800.00 10.25 91.99 2759.09 -12.99 374.45 374.86 0.00 14541557.65 2055778.25 BUILD 2800.00 10.25 91.99 2586.75 -13.75 396.10 398.33 2.50 14541557.65 2055779.98 205079.99 2050.00 12.75 91.99 2586.75 -13.75 396.10 398.33 2.50 14541558.25 205579.98 205079.99 2050.00 17.75 91.99 3059.65 -16.57 448.64 448.91 2.50 14541558.12 205589.90 3000.00 15.25 91.99 3154.20 -16.70 448.164 448.91 2.50 14541558.13 2055824.4 3200.00 22.75 91.99 3385.69 -16.57 448.64 448.91 2.50 14541558.13 2055824.9 3300.00 22.75 91.99 3385.89 -19.38 558.42 558.76 2.50 14541552.73 2055824.9 3300.00 22.75 91.99 3385.89 -19.38 558.42 558.76 2.50 14541552.73 2055821.58 3400.00 22.75 91.99 3385.89 -19.38 558.42 558.76 2.50 14541552.73 2055821.58 3400.00 32.75 91.99 3385.89 -19.38 558.42 558.76 2.50 14541552.73 2055821.58 3400.00 37.75 91.99 3050.00 30.00 91.99 3050.00 30.00 91.99 30515.54 -22.61 66.61 35.61 35.00 30.00 91.99 30515.54 -22.61 66.61 35.00 30.00 91.99 30515.54 22.61 46.65 2.60 66.91 2.50 14541548.26 2055050.32 HOLD 300.00 91.99 30515.54 -22.61 86.13 561.42 0.00 14541548.26 2056050.32 HOLD 300.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 30515.55 -30.00 30.00 91.99 | 0000.00 | 40.00 | 04.00 | 0477.00 | 0.44   | 070.00  | 070.00  | 0.00 | 44544504.00 | 0005075 00 |                |
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| 2700.00 10.00 91.99 2670.29 -12.45 358.80 369.02 0.00 14541588.25 2085762.80 2730.17 10.00 91.99 2700.00 -12.63 384.04 384.26 0.00 14541657.71 2085778.25 BUILD 2700.17 10.00 91.99 2759.09 -12.99 374.45 374.68 0.00 14541657.71 2085778.25 BUILD 2800.00 10.25 91.99 2768.76 -13.05 376.18 376.18 2.50 14541657.65 2085779.99 2800.00 12.75 91.99 2686.75 -13.75 396.10 398.33 2.50 14541556.55 2085779.99 3000.00 12.75 91.99 2686.75 -13.75 396.10 398.33 2.50 14541556.55 2085779.99 3000.00 12.75 91.99 2686.75 -13.75 396.10 398.33 2.50 14541556.50 2085799.90 3000.00 17.75 91.99 3058.85 -15.57 448.64 448.91 2.50 14541556.51 2085824.06 3100.00 17.75 91.99 3058.85 -15.57 448.64 448.91 2.50 14541556.13 2085824.4 3200.00 20.25 91.99 3154.20 -16.70 481.17 481.46 2.50 14541556.13 2085824.4 3200.00 20.275 91.99 3247.23 -17.57 517.78 517.78 518.10 2.50 14541556.13 2085824.97 3300.00 25.25 91.99 3393.85 -19.38 558.42 558.76 2.50 14541551.32 2065962.22 3500.00 27.75 91.99 3428.07 -20.93 603.01 603.37 2.50 14541561.32 2065962.22 3500.00 27.75 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.26 206600.81 3600.00 30.00 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.26 206605.31 HOLD 4000.00 30.00 91.99 3685.75 -26.08 751.37 751.82 0.00 14541548.26 206605.32 3700.00 30.00 91.99 38615.64 -22.61 651.43 651.82 0.00 1454154.62 2066055.31 400.00 30.00 91.99 3861.54 -22.61 651.43 651.82 0.00 1454154.62 2066055.31 400.00 30.00 91.99 3861.56 -31.28 901.28 901.82 0.00 1454154.62 2066055.51 400.00 30.00 91.99 3861.56 -31.28 901.28 901.82 0.00 1454153.94 206605.51 400.00 30.00 91.99 3861.56 -31.28 901.28 901.82 0.00 1454153.94 206605.51 400.00 30.00 91.99 3861.56 -31.28 901.82 0.00 1454153.94 206605.50 400.00 30.00 91.99 4881.57 -39.55 1151.13 1151.82 0.00 1454153.22 2066454.99 4500.00 30.00 91.99 4881.57 -39.55 1151.13 1151.82 0.00 1454153.22 206664.90 4500.00 30.00 91.99 4881.57 -39.55 1151.13 1151.82 0.00 1454153.22 2066645.87 400.00 30.00 91.99 4881.51 48.65 1301.04 1301.82 0.00 1454152.62 2066664.90 4500.00 30.00 91.99 4881.51 48.65 1301.04 13 |         |       |       |         |        |         |         |      |             |            |                |
| 2790.17 10.00 91.99 2770.00 -12.93 364.04 364.26 0.00 14541558.07 2665778.25 BUILD 2780.17 10.00 91.99 2758.09 -12.99 374.46 374.68 0.00 14541557.71 2065778.25 BUILD 2800.00 10.25 91.99 2768.76 -13.05 376.18 376.41 2.50 14541557.71 2065778.25 BUILD 2900.00 12.75 91.99 2866.75 -13.75 396.10 396.33 2.50 14541556.55 2066579.99 0 3000.00 15.25 91.99 3059.65 -15.57 448.64 448.91 2.50 14541556.12 20665824.06 3100.00 17.75 91.99 3154.20 -16.70 481.17 481.46 2.50 14541555.13 2068582.44 3200.00 20.25 91.99 3154.20 -16.70 481.17 481.46 2.50 14541555.13 2068582.44 3200.00 22.75 91.99 3247.23 -17.97 517.76 518.10 2.50 14541552.73 2065921.59 3400.00 22.75 91.99 3247.23 -17.97 517.76 518.10 2.50 14541551.32 206596.22 3500.00 27.75 91.99 3268.07 -20.93 603.01 603.37 2.50 14541551.32 206596.22 3500.00 27.75 91.99 3507.03 -22.44 646.62 646.91 2.50 14541548.26 2066005.32 HOLD 3600.00 30.00 91.99 3505.15 4 -22.61 661.43 661.82 0.00 14541548.26 2066005.32 HOLD 3600.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 206615.20 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 206615.14 400.00 30.00 91.99 3868.75 -26.08 751.37 751.82 0.00 14541530.92 2066305.14 400.00 30.00 91.99 3485.6 -31.28 901.28 901.82 0.00 14541530.92 2066305.14 400.00 30.00 91.99 3485.6 -31.28 901.28 901.82 0.00 14541530.92 2066305.08 400.00 30.00 91.99 4021.76 -34.75 1001.22 1001.82 0.00 14541530.59 2066305.08 400.00 30.00 91.99 488.16 -33.01 951.25 951.82 0.00 14541530.59 2066605.49 400.00 30.00 91.99 488.17 -38.21 1101.16 1101.82 0.00 14541530.5 2066664.99 4500.00 30.00 91.99 488.17 -38.21 1101.16 1101.82 0.00 1454152.32 2066654.99 4500.00 30.00 91.99 488.17 -38.21 1101.16 1101.82 0.00 14541530.75 2066654.99 4500.00 30.00 91.99 488.17 -38.21 1101.16 1101.82 0.00 1454152.32 2066664.99 4500.00 30.00 91.99 488.17 -38.21 1101.16 1101.82 0.00 14541530.75 2066654.99 4500.00 30.00 91.99 488.17 -38.21 1101.16 1101.82 0.00 1454152.32 2066674.79 5100.00 28.30 91.99 471.27 9 46.85 1344.26 1345.07 0.00 1454152.32 2066654.99 4500.00 30.00 91.99 | 2600.00 | 10.00 | 91.99 | 20/1.01 | -11.85 | 341.45  | 341.00  | 0.00 | 14541558.85 | 2005/45.25 |                |
| 2780.07 10.00 91.99 2758.09 -12.99 374.45 374.68 0.00 14541557.65 2065779.98 2900.00 12.75 91.99 2866.75 -13.75 396.10 396.33 2.50 14541556.65 2065799.90   3000.00 15.25 91.99 2866.75 -13.75 396.10 396.33 2.50 14541556.65 2065799.90   3000.00 15.25 91.99 3059.65 -15.57 448.64 448.91 2.50 14541556.12 2065824.08 3100.00 17.75 91.99 3059.65 -15.57 448.64 448.91 2.50 14541556.02 2065884.97 3300.00 20.25 91.99 3154.20 -16.70 481.17 481.46 2.50 14541556.12 2065824.64 3400.00 20.25 91.99 3385.8 -19.38 558.42 558.76 2.50 14541556.12 2065824.8 3400.00 25.25 91.99 3385.8 -19.38 558.42 558.76 2.50 14541551.32 2065921.58 3400.00 25.25 91.99 3385.8 -19.38 558.42 646.52 646.91 2.50 14541551.32 2065921.59 400.00 30.00 91.99 3515.54 -22.61 651.43 651.82 0.00 14541548.80 2066056.32 3700.00 30.00 91.99 3515.54 -22.61 651.43 651.82 0.00 14541546.80 2066055.23 3700.00 30.00 91.99 3602.15 -24.34 701.40 701.82 0.00 14541544.62 2066155.17 390.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541541.10 2066255.11 400.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541541.10 2066255.11 400.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 3085.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 3085.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 4500.00 30.00 91.99 4055.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.00 DROP 400.00 30.00 91.99 4054.00 -30.00 91.99 4055.16 -30.01 951.25 0.00 1454152.00 2066364.90 4600.00 30.00 91.99 4055.16 -30.01 951.90 4056.00 1466.00 1454152.00 2066364.90 4600.00 30.00 91.99 4 |         |       |       |         |        |         | 359.02  | 0.00 | 14541558.25 |            |                |
| 2800.00 10.25 91.99 2768.76 -13.05 376.18 376.41 2.50 14541557.65 2058779.98 2900.00 12.75 91.99 2866.75 -13.75 396.10 396.33 2.50 14541556.95 2058799.99 3000.00 15.25 91.99 3059.65 -15.57 448.64 42.052 2.50 14541555.13 205824.06 3100.00 17.75 91.99 3059.65 -15.57 448.64 42.05 14541555.13 2058824.06 3200.00 20.25 91.99 3154.52 -15.70 481.17 481.64 2.50 14541555.13 2058824.97 3300.00 22.75 91.99 3247.23 -17.97 517.78 518.10 2.50 14541552.73 2058921.58 3400.00 25.25 91.99 3328.58 -19.38 558.42 558.76 2.50 14541552.73 2058921.58 3400.00 25.25 91.99 3428.07 -20.93 603.01 4541541.49.77 2056006.81 3590.17 30.00 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.26 2056050.32 HOLD 3700.00 30.00 91.99 3505.04 -22.61 651.43 651.82 0.00 14541548.26 2056055.23 3700.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 2056155.17 3900.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541541.62 2056155.17 3900.00 30.00 91.99 3868.75 -27.81 801.34 851.82 0.00 14541541.62 2056255.11 4000.00 30.00 91.99 3848.56 -31.28 901.28 901.82 0.00 14541541.62 2056255.11 4000.00 30.00 91.99 3488.56 -31.28 901.28 901.82 0.00 14541541.93 22 2056305.08 4200.00 30.00 91.99 4284.97 -38.21 1101.16 1101.82 0.00 14541530.92 2056355.06 4500.00 30.00 91.99 4284.97 -38.21 1101.16 1101.82 0.00 14541530.72 2056355.05 4500.00 30.00 91.99 4451.77 -43.42 1201.00 20.00 14541530.75 2056545.93 4700.00 30.00 91.99 4451.77 -43.42 1201.00 20.00 14541530.75 2056545.93 4700.00 30.00 91.99 4451.77 -43.42 1251.07 1251.82 0.00 14541520.2 2056654.99 4500.00 30.00 91.99 4451.77 -43.42 1251.07 1251.82 0.00 14541520.2 2056654.99 4500.00 30.00 91.99 4451.77 -43.42 1251.07 1251.82 0.00 14541520.55 2056654.99 4500.00 30.00 91.99 451.77 -43.42 1251.07 1251.82 0.00 14541520.2 2056654.99 4500.00 30.00 91.99 451.77 -43.42 1251.07 1251.82 0.00 14541520.2 2056654.99 4500.00 30.00 91.99 4581.77 -43.42 1251.07 1251.82 0.00 14541520.2 2056654.99 4500.00 20.80 91.99 4716.29 -46.65 1344.26 1344.26 1345.07 0.00 14541520.2 2056664.90 4500.00 20.80 91.99 4584.77 -43.42 1251.07 1251.82  |         |       |       |         |        |         |         |      |             |            |                |
| 2900.00  |         |       |       |         |        |         |         |      |             |            | BUILD          |
| 300.00 15.25 91.99 2963.77 -14.58 420.26 420.52 2.50 14541555.13 2065824.06 3100.00 17.75 91.99 3059.65 -15.57 448.64 448.91 2.50 14541555.13 2065824.49 3200.00 20.25 91.99 3154.20 -16.70 481.17 481.46 2.50 14541555.13 2065824.49 3200.00 20.275 91.99 3247.23 -17.97 517.78 518.10 2.50 14541552.73 2055921.58 3400.00 25.25 91.99 3328.58 -19.38 558.42 558.76 2.50 14541545.77 2056006.81 3590.17 30.00 91.99 3428.07 -20.93 603.01 603.37 2.50 14541544.97 2056006.81 3590.17 30.00 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.26 2056050.32 HOLD 3600.00 30.00 91.99 3515.54 -22.61 651.43 661.82 0.00 14541548.09 206605.23 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 2066155.17 3900.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.63 2056155.07 3900.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541544.62 2066255.11 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541539.42 2056255.11 4000.00 30.00 91.99 348.56 -31.28 901.82 0.00 14541539.42 2056305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541539.42 2056305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541539.42 2056305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541534.22 2056654.99 4000.00 30.00 91.99 4429.49 -38.21 1101.16 1101.82 0.00 14541532.49 2056305.08 4500.00 30.00 91.99 4429.49 -38.21 1101.16 1101.82 0.00 14541532.49 2056554.89 4500.00 30.00 91.99 4429.49 -38.21 1101.16 1101.82 0.00 14541532.49 2056554.89 4500.00 30.00 91.99 4454.77 -43.42 1251.07 1251.82 0.00 14541520.52 2056654.99 4500.00 30.00 91.99 4454.77 -43.42 1251.07 1251.82 0.00 14541520.52 2056654.99 4500.00 30.00 91.99 4454.77 -43.42 1251.07 1251.82 0.00 14541520.52 2056654.99 4500.00 30.00 91.99 4454.77 -43.42 1251.07 1251.82 0.00 14541520.52 2056654.99 4500.00 2.80 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541520.52 2056654.99 5500.00 2.80 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541520.52 2056654.99 190.00 2.80 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541520.52 2056654.99 190.00 2.80 91.99 5458.45 -55.77 1506. |         |       |       |         |        |         |         |      | 14541557.65 |            |                |
| 3100.00 17.75 91.99 3059.65 -15.57 448.64 448.91 2.50 14541555.13 2068652.44 3200.00 20.25 91.99 3142.07 -16.70 481.17 481.46 2.50 14541554.02 2065884.97 3300.00 22.75 91.99 3247.23 -17.97 517.78 518.10 2.50 14541552.73 2065921.58 3400.00 25.25 91.99 3338.58 -19.38 558.42 558.76 2.50 14541551.32 2065962.22 3500.00 27.75 91.99 3428.07 -20.93 603.01 603.37 2.50 14541548.26 2066006.81 3600.00 30.00 91.99 3515.54 -22.61 651.43 651.82 0.00 14541548.26 2066055.23 3700.00 30.00 91.99 3515.54 -22.61 651.43 651.82 0.00 14541548.26 2066105.20 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 1454154.62 2066155.17 390.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541534.92 2066255.11 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541539.42 2066355.11 4100.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541531.99 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541531.99 2066305.08 4200.00 30.00 91.99 4035.16 -34.75 1001.22 1001.82 0.00 14541532.49 2066305.08 4200.00 30.00 91.99 4035.16 -34.75 1001.22 1001.82 0.00 14541532.49 2066305.08 4200.00 30.00 91.99 4035.16 -34.75 1001.22 1001.82 0.00 14541532.49 2066305.08 4200.00 30.00 91.99 4284.97 -38.21 1101.16 1101.82 0.00 14541532.49 2066305.09 4500.00 30.00 91.99 4284.97 -38.21 1101.16 1101.82 0.00 14541532.49 2066305.09 4500.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4641.38 45.15 1301.04 1301.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4641.38 45.15 1301.04 1301.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4938.157 -39.95 1151.13 1151.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4688.17 41.68 1201.10 1201.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4641.38 45.15 1301.04 1301.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4688.17 41.68 1201.10 1201.82 0.00 14541522.13 2066606.90 5000.00 28.80 91.99 4983.91 -51.70 1464.57 139.51 1400.35 1.50 14541520.03 2066605.37 2066605.90 20.80 91.99 4983.91 -51.70 1464.57 139.51 1400.35 1.50 14541520.03 2066605.39 2066605.90  | 2900.00 | 12.75 | 91.99 | 2866.75 | -13.75 | 396.10  | 396.33  | 2.50 | 14541556.95 | 2065799.90 |                |
| 3100.00 17.75 91.99 3059.65 .15.57 448.64 448.91 2.50 14541555.13 2068652.44 3200.00 20.25 91.99 3142.07 -17.97 517.78 518.10 2.50 14541554.02 2065884.97 3300.00 22.75 91.99 3247.23 -17.97 517.78 518.10 2.50 14541552.73 2065921.58 3400.00 25.25 91.99 3328.58 -19.38 558.42 558.76 2.50 14541551.22 2065962.22 3500.00 27.75 91.99 3428.07 -20.93 603.01 603.37 2.50 14541548.26 2066006.81 3600.00 30.00 91.99 3515.54 -22.61 651.43 651.82 0.00 14541548.26 2066055.23 3700.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 1454154.62 2066155.17 3900.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 1454154.62 2066155.17 3900.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541539.42 2066255.11 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541539.42 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 961.82 0.00 1454153.94 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 961.82 0.00 14541531.99 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541532.49 2066305.08 4200.00 30.00 91.99 4284.97 -38.21 1101.16 1101.82 0.00 14541532.49 2066305.09 4500.00 30.00 91.99 4284.97 -38.21 1101.16 1101.82 0.00 14541532.49 2066305.09 4500.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4641.33 451.51 301.04 1201.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4641.33 451.51 301.04 1201.82 0.00 14541522.13 2066606.90 4800.00 30.00 91.99 4727.99 468.81 1350.99 1351.80 1.50 14541520.52 2066605.87 4900.00 28.80 91.99 493.91 -51.70 1465.73 1465.73 1500.00 14541522.13 2066606.45 7 4300.00 28.80 91.99 493.91 -51.70 1465.73 1466.65 1463.53 1.50 1454152.13 2066605.33 1500.00 28.80 91.99 493.91 -51.70 1465.73 1466.65 1463.53 1.50 1454152.40 2066605.33 1500.00 28.80 91.99 493.91 -51.70 1465.70 1465.73 1150.00 1454152.13 2066605.33 1500.00 28.80 91.99 493.91 -51.70 1465.70 1465.73 1150.00 1454152.40 2066605.33 1500.00 2 | 3000.00 | 15.25 | 91.99 | 2963.77 | -14.58 | 420.26  | 420.52  | 2 50 | 14541556.12 | 2065824.06 |                |
| 3200.00 22.25 91.99 3154.20 -16.70 481.17 481.46 2.50 14541554.00 265884.97 3300.00 22.75 91.99 3242.33 -17.97 517.78 518.10 2.50 14541551.32 2065921.58 3400.00 25.25 91.99 3338.58 -19.38 558.42 558.76 2.50 14541551.32 2065962.22 3500.00 27.75 91.99 3428.07 -20.93 603.01 603.37 2.50 14541541.77 2066006.81 3590.17 30.00 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.02 2065050.32 HOLD 3600.00 30.00 91.99 3602.15 -24.34 701.40 701.82 0.00 14541546.38 2066105.20 3800.00 30.00 91.99 3602.15 -24.34 701.40 701.82 0.00 14541546.22 2066105.20 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 1454154.28 2066055.17 3900.00 30.00 91.99 3868.95 -29.54 851.31 851.82 0.00 1454154.28 206625.14 4000.00 30.00 91.99 3848.56 -31.28 901.28 901.82 0.00 14541539.42 2066305.08 4200.00 30.00 91.99 4048.56 -31.28 901.28 901.82 0.00 14541539.42 2066305.08 4200.00 30.00 91.99 4294.97 -38.21 1101.16 101.82 0.00 14541534.22 2066405.02 4400.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541534.22 2066405.02 4400.00 30.00 91.99 4488.17 -41.68 1201.10 1201.82 0.00 14541534.22 2066405.02 4400.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541530.75 2066554.93 4700.00 30.00 91.99 4681.57 -39.95 1151.13 1151.82 0.00 14541530.25 2066604.90 4800.00 30.00 91.99 4681.57 -39.95 1151.13 1151.82 0.00 14541530.25 2066654.99 4800.00 30.00 91.99 4468.17 -41.68 1201.10 1201.82 0.00 14541530.25 2066654.90 4800.00 30.00 91.99 4681.31 445.42 1251.07 1251.82 0.00 14541527.28 2066654.87 4900.00 30.00 91.99 477.99 -46.65 1344.26 1345.07 0.00 14541520.53 2066664.90 5000.00 28.80 91.99 477.99 -46.65 1344.26 1345.07 0.00 14541520.53 2066664.90 5000.00 28.80 91.99 477.99 466.81 1350.99 1351.80 1.50 14541512.34 2066664.90 5000.00 28.80 91.99 477.99 46.65 1344.26 1345.07 0.00 14541520.53 2066654.87 5000.00 28.80 91.99 477.99 46.65 1344.26 1345.07 0.00 14541520.53 2066664.90 5000.00 28.80 91.99 477.99 46.65 1344.26 1345.07 0.00 14541520.53 2066664.90 5000.00 28.80 91.99 5000.00 5000.00 5000.00 91.99 5000.00 5000.00 91.99 468.80 5000.00 5000.00 91.99 4 |         |       |       |         |        |         |         |      |             |            |                |
| 3300.00  |         |       |       |         |        |         |         |      |             |            |                |
| 3400.00 25.25 91.99 3338.58 -19.38 558.42 558.76 2.50 14541551.32 2065962.22  3500.00 27.75 91.99 3428.07 -20.93 603.01 603.37 2.50 14541549.77 2066006.81 3590.17 30.00 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.26 2066050.32 HOLD 3600.00 30.00 91.99 3607.55 -22.61 651.43 651.82 0.00 14541548.26 2066105.20 3700.00 30.00 91.99 3608.75 -26.08 751.37 751.82 0.00 14541546.36 2066105.20 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541546.36 2066105.20 3800.00 30.00 91.99 3775.35 -27.81 801.34 801.82 0.00 14541544.62 2066155.17 3900.00 30.00 91.99 3868.95 -29.54 851.31 851.82 0.00 14541531.46 2066255.11 4100.00 30.00 91.99 3948.56 -31.28 901.28 901.82 0.00 14541539.42 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.69 2066355.05 4400.00 30.00 91.99 4121.76 -34.75 1001.22 1001.82 0.00 14541537.69 2066355.05 4600.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541530.75 2066454.99 4500.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541530.75 206654.96 4600.00 30.00 91.99 4554.77 -39.95 1151.13 1151.82 0.00 14541530.75 2066654.96 490.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 1454152.55 206664.90 4800.00 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 1454152.55 2066664.90 4800.00 30.00 91.99 4815.41 -48.67 1399.51 1400.35 1.50 1454152.05 2066664.90 490.00 28.80 91.99 4716.29 -46.68 1344.26 1345.07 0.00 1454152.05 2066664.90 490.00 28.80 91.99 4716.29 -46.68 1344.26 1345.07 0.00 1454152.05 2066664.90 500.00 28.80 91.99 4716.29 -46.68 1344.26 1345.07 0.00 1454152.05 2066664.90 500.00 28.80 91.99 4815.41 -48.67 1399.51 1400.35 1.50 14541510.90 2066883.41 500.00 28.80 91.99 4993.91 -50.76 146.26 1344.26 1345.07 1.50 14541510.90 2066864.5 500.00 28.80 91.99 5084.87 -53.14 1531.31 153.20 1.50 14541510.49 2066664.5 WASATCH 5000.00 28.80 91.99 5084.87 -53.14 1531.31 1532.05 1.50 14541510.49 2066864.5 WASATCH 5000.00 28.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541510.49 2066664.5 WASATCH 5000.00 18.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541510.69 206670 |         |       |       |         |        |         |         |      |             |            |                |
| 3500.00 27.75 91.99 3428.07 -20.93 603.01 603.37 2.50 14541549.77 2066006.81 3590.17 30.00 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.26 2086050.32 HOLD 3600.00 30.00 91.99 3515.54 -22.61 651.43 651.82 0.00 14541548.09 2066055.23 3700.00 30.00 91.99 3602.15 -24.34 701.40 701.82 0.00 14541548.62 2086105.20 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541548.62 2086105.20 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 2086155.17 3900.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541542.89 2066205.14 2000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541541.62 2086555.11 41000.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.89 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.89 2066355.05 4300.00 30.00 91.99 4204.97 -38.21 1101.16 1101.82 0.00 14541532.42 2066454.99 4500.00 30.00 91.99 4381.57 -38.95 1151.13 1151.82 0.00 14541520.2 206654.99 4500.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541520.2 2066654.90 4600.00 30.00 91.99 4468.17 -41.68 1201.10 1201.82 0.00 14541520.2 2066654.99 4500.00 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541520.2 2066654.87 4900.00 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541520.55 2066640.90 4800.00 30.00 91.99 4716.29 -46.68 1350.99 151.80 1.50 14541520.2 2066654.87 4900.00 28.80 91.99 4716.29 -46.88 1350.99 151.80 1.50 14541520.53 2066634.90 4800.00 28.80 91.99 4716.29 -46.88 1350.99 151.80 1.50 14541520.53 2066654.87 4900.00 28.80 91.99 493.00 -50.76 1462.65 1463.53 1.50 14541520.53 2066693.41 500.00 28.80 91.99 493.00 -50.76 1462.65 1463.53 1.50 14541520.00 206693.41 500.00 28.80 91.99 493.00 -50.76 1462.65 1463.53 1.50 14541520.00 2066893.41 500.00 28.80 91.99 5458.64 -58.06 1673.01 1400.51 1.50 14541512.64 206606.45 90 500.00 28.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541512.64 2066706.81 500.00 28.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541512.64 206706.81 500.00 14.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541512.64 206706.81 500.00 14.80 91.99 5563.2 |         |       |       |         |        |         |         |      |             |            |                |
| 3590.17 30.00 91.99 3507.03 -22.44 646.52 646.91 2.50 14541548.26 2066055.23 3000.00 30.00 91.99 3515.54 -22.61 651.43 651.82 0.00 14541546.30 2066055.23 3700.00 30.00 91.99 3602.15 -24.34 701.40 701.62 0.00 14541546.36 2066105.20 3800.00 30.00 91.99 3608.75 -26.08 751.37 751.82 0.00 14541546.36 2066105.20 2066155.17 3000.00 30.00 91.99 3775.35 -27.81 801.34 801.82 0.00 14541541.89 2066205.14 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541541.16 2066255.11 4100.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541531.39 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.69 2066355.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.69 2066355.05 4300.00 30.00 91.99 4208.36 -36.48 1051.19 1051.82 0.00 14541534.22 206645.02 4400.00 30.00 91.99 4283.36 -36.48 1051.19 1051.82 0.00 14541534.22 206645.02 4400.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541530.75 2066504.96 4600.00 30.00 91.99 4458.17 -41.68 1201.10 1201.82 0.00 14541520.02 2066664.90 4800.00 30.00 91.99 4458.17 -41.68 1201.10 1201.82 0.00 14541520.02 2066664.90 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541522.82 2066748.00 DROP 5000.00 29.80 91.99 4451.34 -45.15 1301.04 1301.82 0.00 14541523.82 2066748.00 DROP 5000.00 29.80 91.99 4727.99 -46.65 1344.26 1345.07 0.00 14541522.13 2068603.31 500.00 26.80 91.99 4993.91 -51.70 1445.73 1445.73 1.50 14541522.32 2066748.00 DROP 5000.00 29.80 91.99 4993.91 -51.70 1445.73 1445.73 1.50 14541520.03 2066893.31 500.00 26.80 91.99 4993.91 -51.70 1489.61 1490.51 1.50 14541519.00 2068893.41 5400.00 23.80 91.99 5084.87 -53.14 1551.13 1532.05 1.50 14541519.00 2066894.93 5500.00 22.30 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541512.64 2067076.81 5000.00 14.80 91.99 5556.24 -59.08 1702.31 1703.33 1.50 14541510.69 206703.28 206710.76 5000.00 14.80 91.99 5556.24 -59.08 1702.31 1703.33 1.50 14541510.69 206703.28 2067132.89   | 3400.00 | 20.20 | 31.33 | 5550.50 | -18.50 | 330.42  | 330.70  | 2.50 | 14041001.02 | 2003902.22 |                |
| 3600.00 30.00 91.99 3602.15 -24.34 701.40 701.82 0.00 14541548.09 2066055.23 3700.00 30.00 91.99 3608.15 -24.34 701.40 701.82 0.00 14541544.62 2066105.20 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 2066105.17 3900.00 30.00 91.99 3765.35 -27.81 801.34 801.82 0.00 14541542.89 2066205.14 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541541.16 2066255.11 4100.00 30.00 91.99 3948.56 -31.28 901.28 901.82 0.00 14541537.69 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 961.25 951.82 0.00 14541537.69 2066305.05 4300.00 30.00 91.99 4121.76 -34.75 1001.22 1001.82 0.00 14541537.69 2066305.05 4300.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541534.22 2066454.99 4500.00 30.00 91.99 4284.97 -38.21 1101.16 1101.82 0.00 14541530.75 2066504.96 4600.00 30.00 91.99 4468.17 -41.68 1201.10 1201.82 0.00 14541530.75 2066604.90 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541527.28 206664.90 4800.00 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541523.82 206664.90 4800.00 30.00 91.99 4815.41 -41.68 1201.10 1201.82 0.00 14541527.28 206664.90 4800.00 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541523.82 206674.84 4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541523.82 2066748.06 500.00 29.80 91.99 4716.29 -46.68 1360.99 1351.80 1.50 14541523.13 2068603.31 500.00 29.80 91.99 4815.41 -48.57 1399.51 1400.35 1.50 14541523.13 2068603.31 500.00 29.80 91.99 4938.90 -50.76 1465.65 1463.53 1.50 1454152.13 2066804.95 500.00 26.80 91.99 4938.91 -51.70 1445.73 1446.60 1.50 14541519.00 2066894.95 500.00 22.30 91.99 5084.87 -53.14 1531.13 1632.05 1.50 14541519.00 2066894.95 500.00 22.30 91.99 5084.87 -53.14 1531.13 1632.05 1.50 14541519.00 2066894.95 500.00 22.30 91.99 5084.87 -53.14 1531.13 1632.05 1.50 14541519.00 2066894.95 500.00 22.30 91.99 5084.87 -53.14 1531.13 1632.05 1.50 14541519.40 2066884.95 500.00 22.30 91.99 5084.87 -53.14 1531.13 1632.05 1.50 14541519.00 2066894.95 500.00 22.30 91.99 5084.87 -53.14 1531.13 1632.05 1.50 14541519.40 2066886.45 500.00 22.30 91.99 50 |         |       |       |         |        |         |         |      |             |            |                |
| 3700.00 30.00 91.99 3602.15 -24.34 701.40 701.82 0.00 14541546.38 2066105.20 2060155.17 3000.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 2066155.17 3000.00 30.00 91.99 3775.35 -27.81 801.34 801.82 0.00 14541542.89 2066205.14 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541541.16 2066255.11 4100.00 30.00 91.99 3948.56 -31.28 901.28 901.82 0.00 14541531.39 42 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.69 2066355.05 4300.00 30.00 91.99 4121.76 -34.75 1001.22 1001.82 0.00 14541535.95 2066405.02 4400.00 30.00 91.99 429.97 -38.21 1101.16 1101.82 0.00 14541534.22 206654.99 4500.00 30.00 91.99 429.97 -38.21 1101.16 1101.82 0.00 14541530.75 2066454.99 4600.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541530.75 2066554.93 4700.00 30.00 91.99 44581.7 -41.68 1201.10 1201.82 0.00 14541527.28 2066604.90 4800.00 30.00 91.99 4648.17 -41.68 1201.10 1201.82 0.00 14541527.28 2066664.90 4800.00 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541525.55 206674.84 4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541521.32 2066654.87 4900.00 28.30 91.99 4716.29 -46.68 1350.99 1351.80 1.50 14541521.3 2066674.97 5100.00 28.30 91.99 4993.91 -51.70 1445.73 1450.51 1.50 14541521.3 2066684.95 5200.00 28.30 91.99 4904.07 -50.17 1445.73 1490.51 1.50 14541521.3 2066864.95 5206674.96 5000.00 28.30 91.99 4993.91 -51.70 1445.73 1445.73 150 14541521.3 2066864.95 306893.41 5200.00 26.80 91.99 4993.91 -51.70 1445.73 1445.73 150 14541521.3 2066893.41 5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 1454151.90 2066864.5 WASATCH 5000.00 22.30 91.99 5168.89 -55.77 1606.96 1607.93 1.50 1454151.374 2067045.02 5600.00 22.30 91.99 5168.89 -55.77 1606.96 1607.93 1.50 1454151.374 2067045.02 5600.00 16.30 91.99 5554.24 -59.08 1702.31 1703.33 1.50 1454151.3.74 2067045.02 5600.00 16.30 91.99 5556.58 -50.00 1722.01 1722.09 1730.13 1.50 1454151.62 2067106.11 5000.00 14.80 91.99 5650.58 -60.01 1722.09 1730.13 1.50 1454151.62 2067106.11 5000.00 14.80 91.99 5650.58 -60.01 1722.09 173 |         |       |       |         |        |         |         |      |             |            | HOLD           |
| 3800.00 30.00 91.99 3688.75 -26.08 751.37 751.82 0.00 14541544.62 2066155.17  3900.00 30.00 91.99 3775.35 -27.81 801.34 801.82 0.00 14541542.89 2066205.14 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541539.42 2066305.08 4200.00 30.00 91.99 3948.56 -31.28 901.28 901.82 0.00 14541537.89 2066355.05 4300.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.69 2066355.05 4300.00 30.00 91.99 4121.76 -34.75 1001.22 1001.82 0.00 14541535.95 2066405.02 4400.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541532.42 2066504.99 4500.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541530.75 2066564.93 4700.00 30.00 91.99 4458.17 -41.68 1201.10 1201.82 0.00 14541527.28 2066654.99 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541525.55 2066704.84 4986.50 30.00 91.99 4611.38 -45.15 1301.04 1301.82 0.00 14541524.05 2066748.06 DROP 5000.00 29.80 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541523.22 2066748.06 DROP 5000.00 28.30 91.99 4815.41 -48.57 1399.51 1400.35 1.50 14541520.53 2066893.31 5200.00 26.80 91.99 4993.91 -51.70 1445.73 1446.60 1.50 1454151.94 2066864.5 WASATCH 5300.00 23.80 91.99 4993.91 -51.70 1445.73 1446.60 1.50 1454151.74 2066893.41 5400.00 23.80 91.99 5064.87 -53.14 1531.13 1532.05 1.50 1454151.37 2066883.41 5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 1454151.74 2066893.43 5500.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 1454151.37 2066893.41 5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 1454151.74 2066974.06 5600.00 20.80 91.99 5554.24 58.06 1673.01 1674.02 1.50 1454151.74 2067076.81 5000.00 14.80 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541512.64 2067076.81 5000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.68 2067108.19 2067108.19 5000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.68 2067108.19 2067108.19 5000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.68 2067108.19 2067108.19 5000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.68 2067108.19 2067108.29                             |         |       |       |         |        |         |         |      |             |            |                |
| 3900.00 30.00 91.99 3775.35 -27.81 801.34 801.82 0.00 14541542.89 2066205.14 4000.00 30.00 91.99 3861.95 -29.54 851.31 851.82 0.00 14541541.16 2066255.11 4100.00 30.00 91.99 3948.56 -31.28 901.28 901.82 0.00 14541539.42 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.69 2066355.05 4300.00 30.00 91.99 4121.76 -34.75 1001.22 1001.82 0.00 14541535.95 2066405.02 4400.00 30.00 91.99 4294.97 -34.21 1101.16 1101.82 0.00 14541532.42 2066504.96 4600.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541530.75 2066504.96 4600.00 30.00 91.99 4458.17 -41.68 1201.10 1201.82 0.00 14541520.02 2066604.90 4800.00 30.00 91.99 4451.77 -43.42 1251.07 1251.82 0.00 14541527.28 2066654.87 4900.00 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541527.28 2066748.06 DROP 5000.00 29.80 91.99 4727.99 46.88 1350.99 1351.80 1.50 14541520.53 2066748.06 DROP 5100.00 28.30 91.99 4938.00 -50.76 1462.65 1463.53 1.50 14541520.53 2066849.53 5200.00 25.30 91.99 4993.91 -51.70 1498.61 1490.51 1.50 14541520.53 2066849.31 5500.00 22.30 91.99 5105.00 23.80 91.99 5068.87 -50.77 1606.96 1607.93 1.50 14541515.74 2066866.45 WASATCH 5000.00 20.80 91.99 5068.87 -55.77 1606.96 1607.93 1.50 14541513.74 2066866.45 5000.00 20.80 91.99 5068.87 -55.77 1606.96 1607.93 1.50 14541513.74 2066866.45 5000.00 20.80 91.99 5068.88 -55.77 1606.96 1607.93 1.50 14541513.74 2066866.45 5000.00 20.80 91.99 5068.88 -56.96 1641.22 1642.21 1.50 14541513.74 2067045.02 50600.00 16.30 91.99 5554.24 -59.08 1700.31 1674.02 1.50 14541511.62 206706.81 5000.00 16.30 91.99 5555.58 -60.01 1729.09 1730.31 1.50 14541511.62 2067106.11 6000.00 16.30 91.99 5555.58 -60.01 1729.09 1730.31 1.50 14541511.62 2067106.11 6000.00 14.80 91.99 5555.58 -60.01 1729.09 1730.31 1.50 14541511.60 2067106.11 6000.00 14.80 91.99 5555.58 -60.01 1729.09 1730.31 1.50 14541511.60 2067106.11 6000.00 14.80 91.99 5555.58 -60.01 1729.09 1730.31 1.50 14541511.60 2067108.11   | 3700.00 |       | 91.99 | 3602.15 |        |         | 701.82  | 0.00 | 14541546.36 | 2066105.20 |                |
| 4000.00         30.00         91.99         3861.95         -29.54         851.31         851.82         0.00         14541541.16         2066255.11           4100.00         30.00         91.99         3948.56         -31.28         901.28         901.82         0.00         14541537.69         2066305.08           4200.00         30.00         91.99         4035.16         -33.01         951.25         951.82         0.00         14541537.69         2066355.05           4300.00         30.00         91.99         4121.76         -34.75         1001.22         1001.82         0.00         14541537.59         2066454.99           4500.00         30.00         91.99         4294.97         -38.21         1101.16         1101.82         0.00         14541534.22         2066544.99           4500.00         30.00         91.99         4294.97         -38.21         1101.16         1101.82         0.00         14541530.22         2066544.99           4500.00         30.00         91.99         4468.17         -41.68         1201.10         1201.82         0.00         14541530.22         206654.93           4700.00         30.00         91.99         4468.17         -41.68         1201.10         1201.82 </td <td>3800.00</td> <td>30.00</td> <td>91.99</td> <td>3688.75</td> <td>-26.08</td> <td>751.37</td> <td>751.82</td> <td>0.00</td> <td>14541544.62</td> <td>2066155.17</td> <td></td>   | 3800.00 | 30.00 | 91.99 | 3688.75 | -26.08 | 751.37  | 751.82  | 0.00 | 14541544.62 | 2066155.17 |                |
| 4000.00         30.00         91.99         3861.95         -29.54         851.31         851.82         0.00         14541541.16         2066255.11           4100.00         30.00         91.99         3948.56         -31.28         901.28         90.00         14541537.69         2066305.08           4200.00         30.00         91.99         4035.16         -33.01         951.25         951.82         0.00         14541537.69         2066355.05           4300.00         30.00         91.99         4121.76         -34.75         1001.22         1001.82         0.00         14541537.69         2066454.99           4500.00         30.00         91.99         4294.97         -38.21         1101.16         1101.82         0.00         14541534.22         2066544.99           4500.00         30.00         91.99         4294.97         -38.21         1101.16         1101.82         0.00         14541530.22         206654.99           4500.00         30.00         91.99         4468.17         -41.68         1201.10         1201.82         0.00         14541530.22         206654.93           4700.00         30.00         91.99         4468.17         -41.68         1201.10         1201.82         0.00 <td>3900.00</td> <td>30.00</td> <td>91.99</td> <td>3775.35</td> <td>-27.81</td> <td>801.34</td> <td>801.82</td> <td>0.00</td> <td>14541542.89</td> <td>2066205.14</td> <td></td>  | 3900.00 | 30.00 | 91.99 | 3775.35 | -27.81 | 801.34  | 801.82  | 0.00 | 14541542.89 | 2066205.14 |                |
| 4100.00 30.00 91.99 3948.56 -31.28 901.28 901.82 0.00 14541539.42 2066305.08 4200.00 30.00 91.99 4035.16 -33.01 951.25 951.82 0.00 14541537.69 2066355.05 4300.00 30.00 91.99 4121.76 -34.75 1001.22 1001.82 0.00 14541535.95 2066405.02 4400.00 30.00 91.99 4208.36 -36.48 1051.19 1051.82 0.00 14541532.29 2066544.99 4500.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541532.49 2066504.96 4600.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541530.75 206654.93 4700.00 30.00 91.99 4458.17 -41.68 1201.10 1201.82 0.00 14541529.02 2066604.90 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541527.28 2066654.87 4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541523.82 2066748.06 DROP 5000.00 29.80 91.99 477.99 -46.68 1350.99 1351.80 1.50 14541522.13 2066803.31 5200.00 28.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541520.53 2066864.95 2066854.95 500.00 28.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541520.53 2066864.95 500.00 23.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541519.94 2066866.45 WASATCH 5400.00 23.80 91.99 5084.87 -53.14 1531.13 152.05 1.50 14541519.94 2066884.93 5500.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541519.00 206893.41 5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.56 206674.06 5500.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.50 2066893.41 5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.56 2066974.06 5500.00 20.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.56 2066934.93 5500.00 22.30 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.50 2066934.93 5500.00 20.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.50 2066934.93 5500.00 20.80 91.99 5084.87 -53.14 1531.31 1532.05 1.50 14541517.60 2066934.93 5500.00 20.80 91.99 5084.87 -53.14 1531.31 1532.05 1.50 14541517.60 2066934.93 5500.00 20.80 91.99 5084.87 -53.14 1531.31 1532.05 1.50 14541513.74 206706.81 5000.00 17.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541510.69 206705.02 506710.76 5000.00 16.30 91.99 5555.88 -60.01 1729.09 1730.13 |         |       |       |         |        |         |         |      |             |            |                |
| 4200.00         30.00         91.99         4035.16         -33.01         951.25         951.82         0.00         14541537.69         2066355.05           4300.00         30.00         91.99         4121.76         -34.75         1001.22         1001.82         0.00         14541535.95         2066405.02           4400.00         30.00         91.99         4208.36         -36.48         1051.19         1051.82         0.00         14541534.22         2066454.99           4500.00         30.00         91.99         4294.97         -38.21         1101.16         1101.82         0.00         14541532.49         2066504.96           4600.00         30.00         91.99         44881.57         -39.95         1151.13         1151.82         0.00         14541530.75         2066504.93           4700.00         30.00         91.99         4468.17         -41.68         1201.10         1201.82         0.00         14541529.02         2066604.90           4800.00         30.00         91.99         4641.38         -45.15         1301.04         1301.82         0.00         14541525.55         2066704.84           4986.50         30.00         91.99         4716.29         -46.65         1344.26         134   |         |       |       |         |        |         |         |      |             |            |                |
| 4300.00         30.00         91.99         4121.76         -34.75         1001.22         1001.82         0.00         -14541535.95         2066405.02           4400.00         30.00         91.99         4208.36         -36.48         1051.19         1051.82         0.00         14541534.22         2066454.99           4500.00         30.00         91.99         4294.97         -38.21         1101.16         1101.82         0.00         14541532.49         2066504.96           4600.00         30.00         91.99         4381.57         -39.95         1151.13         1151.82         0.00         14541530.75         2066554.93           4700.00         30.00         91.99         4468.17         -41.68         1201.10         1201.82         0.00         14541529.02         2066654.93           4900.00         30.00         91.99         4554.77         -43.42         1251.07         1251.82         0.00         14541527.28         2066654.87           4900.00         30.00         91.99         4641.38         -45.15         1301.04         1301.82         0.00         14541524.05         2066748.06         DROP           5000.00         29.80         91.99         4716.29         -46.65         1344   |         |       |       |         |        |         |         |      |             |            |                |
| 4500.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541532.49 2066504.96 4600.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541530.75 2066554.93 4700.00 30.00 91.99 4468.17 -41.68 1201.10 1201.82 0.00 14541529.02 2066604.90 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541527.28 2066654.87 4900.00 30.00 91.99 4641.38 -45.15 1301.04 1301.82 0.00 14541527.28 2066654.87 4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541525.55 2066704.84 4986.50 30.00 91.99 4727.99 -46.88 1350.99 1351.80 1.50 14541523.82 2066754.79 5100.00 28.80 91.99 4815.41 -48.57 1399.51 1400.35 1.50 14541520.53 2066803.31 5200.00 26.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541520.53 2066804.95 206689.41 5400.00 25.30 91.99 4938.00 -50.76 1462.65 1463.53 1.50 14541520.53 2066864.5 WASATCH 5300.00 25.30 91.99 4993.91 -51.70 1489.61 1490.51 1.50 14541510.69 2066893.41 5500.00 22.30 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.56 2066934.93 5500.00 22.30 91.99 5176.89 -54.49 1570.26 1571.20 1.50 14541513.74 2067045.02 5800.00 17.80 91.99 5363.83 -56.96 1641.22 1642.21 1.50 14541513.74 2067045.02 5800.00 17.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541512.64 2067076.81 5900.00 14.80 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541510.69 2067132.89   |         |       |       |         |        |         |         |      |             |            |                |
| 4500.00 30.00 91.99 4294.97 -38.21 1101.16 1101.82 0.00 14541532.49 2066504.96 4600.00 30.00 91.99 4381.57 -39.95 1151.13 1151.82 0.00 14541530.75 2066554.93 4700.00 30.00 91.99 4468.17 -41.68 1201.10 1201.82 0.00 14541529.02 2066604.90 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541527.28 2066654.87 4900.00 30.00 91.99 4641.38 -45.15 1301.04 1301.82 0.00 14541527.28 2066654.87 4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541525.55 2066704.84 4986.50 30.00 91.99 4727.99 -46.88 1350.99 1351.80 1.50 14541523.82 2066754.79 5100.00 28.80 91.99 4815.41 -48.57 1399.51 1400.35 1.50 14541520.53 2066803.31 5200.00 26.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541520.53 2066804.95 206689.41 5400.00 25.30 91.99 4938.00 -50.76 1462.65 1463.53 1.50 14541520.53 2066864.5 WASATCH 5300.00 25.30 91.99 4993.91 -51.70 1489.61 1490.51 1.50 14541510.69 2066893.41 5500.00 22.30 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.56 2066934.93 5500.00 22.30 91.99 5176.89 -54.49 1570.26 1571.20 1.50 14541513.74 2067045.02 5800.00 17.80 91.99 5363.83 -56.96 1641.22 1642.21 1.50 14541513.74 2067045.02 5800.00 17.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541512.64 2067076.81 5900.00 14.80 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541510.69 2067132.89   | 4400.00 |       |       |         | 22.42  | 10-110  |         |      |             |            |                |
| 4600.00         30.00         91.99         4381.57         -39.95         1151.13         1151.82         0.00         14541530.75         2066554.93           4700.00         30.00         91.99         4468.17         -41.68         1201.10         1201.82         0.00         14541529.02         2066604.90           4800.00         30.00         91.99         4554.77         -43.42         1251.07         1251.82         0.00         14541527.28         2066654.87           4900.00         30.00         91.99         4641.38         -45.15         1301.04         1301.82         0.00         14541525.55         2066704.84           4986.50         30.00         91.99         4716.29         -46.65         1344.26         1345.07         0.00         14541523.82         2066748.06         DROP           5000.00         29.80         91.99         4727.99         -46.88         1350.99         1351.80         1.50         14541523.82         2066754.79           5100.00         28.30         91.99         4904.07         -50.17         1445.73         1446.60         1.50         14541520.53         2066803.31           5237.92         26.23         91.99         4998.00         -50.76         1462.   |         |       |       |         |        |         |         |      |             |            |                |
| 4700.00 30.00 91.99 4468.17 -41.68 1201.10 1201.82 0.00 14541529.02 2066604.90 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541527.28 2066654.87  4900.00 30.00 91.99 4641.38 -45.15 1301.04 1301.82 0.00 14541525.55 2066704.84 4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541524.05 2066748.06 DROP 5000.00 29.80 91.99 4727.99 -46.88 1350.99 1351.80 1.50 14541523.82 2066754.79 5100.00 28.30 91.99 4815.41 -48.57 1399.51 1400.35 1.50 14541522.13 2066803.31 5200.00 26.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541520.53 2066849.53  5237.92 26.23 91.99 4938.00 -50.76 1462.65 1463.53 1.50 14541519.94 2066866.45 WASATCH 5300.00 25.30 91.99 4993.91 -51.70 1489.61 1490.51 1.50 14541519.00 2066893.41 5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.56 2066934.93 5500.00 22.30 91.99 5176.89 -54.49 1570.26 1571.20 1.50 14541514.93 2067010.76  5700.00 19.30 91.99 5363.83 -56.96 1641.22 1642.21 1.50 14541513.74 2067045.02 5800.00 17.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541511.62 2067076.81 5900.00 16.30 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541511.62 2067132.89  |         |       |       |         |        |         |         |      |             |            |                |
| 4800.00 30.00 91.99 4554.77 -43.42 1251.07 1251.82 0.00 14541527.28 206654.87  4900.00 30.00 91.99 4641.38 -45.15 1301.04 1301.82 0.00 14541525.55 2066704.84  4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541524.05 2066748.06 DROP  5000.00 29.80 91.99 4727.99 -46.88 1350.99 1351.80 1.50 14541523.82 2066754.79  5100.00 28.30 91.99 4815.41 -48.57 1399.51 1400.35 1.50 14541522.13 2066803.31  5200.00 26.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541520.53 2066849.53  5237.92 26.23 91.99 4938.00 -50.76 1462.65 1463.53 1.50 14541519.00 2066866.45 WASATCH  5300.00 25.30 91.99 4993.91 -51.70 1489.61 1490.51 1.50 14541519.00 2066893.41  5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541516.21 2066974.06  5600.00 20.80 91.99 5269.89 -55.77 1606.96 1607.93 1.50 14541514.93 2067010.76  5700.00 19.30 91.99 5363.83 -56.96 1641.22 1642.21 1.50 14541512.64 2067076.81  5900.00 17.80 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541510.69 2067132.89   |         |       |       |         |        |         |         |      |             |            |                |
| 4900.00 30.00 91.99 4641.38 -45.15 1301.04 1301.82 0.00 14541525.55 2066704.84 4986.50 30.00 91.99 4716.29 -46.65 1344.26 1345.07 0.00 14541524.05 2066748.06 DROP 5000.00 29.80 91.99 4727.99 -46.88 1350.99 1351.80 1.50 14541523.82 2066754.79 5100.00 28.30 91.99 4815.41 -48.57 1399.51 1400.35 1.50 14541522.13 2066803.31 5200.00 26.80 91.99 4904.07 -50.17 1445.73 1446.60 1.50 14541520.53 2066849.53 5207.92 26.23 91.99 4938.00 -50.76 1462.65 1463.53 1.50 14541520.53 2066864.5 WASATCH 5300.00 23.80 91.99 4993.91 -51.70 1489.61 1490.51 1.50 14541519.00 2066893.41 5400.00 23.80 91.99 5084.87 -53.14 1531.13 1532.05 1.50 14541517.56 2066934.93 5500.00 22.30 91.99 5176.89 -54.49 1570.26 1571.20 1.50 14541514.93 2067010.76 5700.00 19.30 91.99 5363.83 -56.96 1641.22 1642.21 1.50 14541513.74 2067045.02 5800.00 17.80 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541511.62 2067106.11 6000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.69 2067132.89  |         |       |       |         |        |         |         |      |             |            |                |
| 4986.50       30.00       91.99       4716.29       -46.65       1344.26       1345.07       0.00       14541524.05       2066748.06       DROP         5000.00       29.80       91.99       4727.99       -46.88       1350.99       1351.80       1.50       14541523.82       2066754.79         5100.00       28.30       91.99       4815.41       -48.57       1399.51       1400.35       1.50       14541522.13       2066803.31         5200.00       26.80       91.99       4904.07       -50.17       1445.73       1446.60       1.50       14541520.53       2066849.53         5237.92       26.23       91.99       4938.00       -50.76       1462.65       1463.53       1.50       14541519.94       2066866.45       WASATCH         5300.00       25.30       91.99       4993.91       -51.70       1489.61       1490.51       1.50       14541519.94       2066864.45       WASATCH         5400.00       23.80       91.99       5084.87       -53.14       1531.13       1532.05       1.50       14541519.00       2066893.493         5500.00       22.30       91.99       5176.89       -54.49       1570.26       1571.20       1.50       14541514.93       2067010.7   | 4800.00 | 30.00 | 91.99 | 4554.77 | -43.42 | 1251.07 | 1251.82 | 0.00 | 14541527.28 | 2066654.87 |                |
| 4986.50       30.00       91.99       4716.29       -46.65       1344.26       1345.07       0.00       14541524.05       2066748.06       DROP         5000.00       29.80       91.99       4727.99       -46.88       1350.99       1351.80       1.50       14541523.82       2066754.79         5100.00       28.30       91.99       4815.41       -48.57       1399.51       1400.35       1.50       14541522.13       2066803.31         5200.00       26.80       91.99       4904.07       -50.17       1445.73       1446.60       1.50       14541520.53       2066849.53         5237.92       26.23       91.99       4938.00       -50.76       1462.65       1463.53       1.50       14541519.94       2066866.45       WASATCH         5300.00       25.30       91.99       4993.91       -51.70       1489.61       1490.51       1.50       14541519.00       2066893.41         5400.00       23.80       91.99       5084.87       -53.14       1531.13       1532.05       1.50       14541517.56       2066974.06         5600.00       20.80       91.99       5176.89       -54.49       1570.26       1571.20       1.50       14541514.93       2067010.76 <tr< td=""><td>4900.00</td><td>30.00</td><td>91.99</td><td>4641.38</td><td>-45.15</td><td>1301.04</td><td>1301.82</td><td>0.00</td><td>14541525.55</td><td>2066704.84</td><td></td></tr<>   | 4900.00 | 30.00 | 91.99 | 4641.38 | -45.15 | 1301.04 | 1301.82 | 0.00 | 14541525.55 | 2066704.84 |                |
| 5000.00         29.80         91.99         4727.99         -46.88         1350.99         1351.80         1.50         14541523.82         2066754.79           5100.00         28.30         91.99         4815.41         -48.57         1399.51         1400.35         1.50         14541522.13         2066803.31           5200.00         26.80         91.99         4904.07         -50.17         1445.73         1446.60         1.50         14541520.53         2066849.53           5237.92         26.23         91.99         4938.00         -50.76         1462.65         1463.53         1.50         14541519.94         2066866.45         WASATCH           5300.00         25.30         91.99         4993.91         -51.70         1489.61         1490.51         1.50         14541519.00         2066893.41           5400.00         23.80         91.99         5084.87         -53.14         1531.13         1532.05         1.50         14541519.00         2066934.93           5500.00         22.30         91.99         5176.89         -54.49         1570.26         1571.20         1.50         14541516.21         2066974.06           5600.00         20.80         91.99         5363.83         -56.96         16   | 4986.50 | 30.00 | 91.99 |         |        |         |         | 0.00 |             |            | DROP           |
| 5100.00         28.30         91.99         4815.41         -48.57         1399.51         1400.35         1.50         14541522.13         2066803.31           5200.00         26.80         91.99         4904.07         -50.17         1445.73         1446.60         1.50         14541520.53         2066849.53           5237.92         26.23         91.99         4938.00         -50.76         1462.65         1463.53         1.50         14541519.94         2066866.45         WASATCH           5300.00         25.30         91.99         4993.91         -51.70         1489.61         1490.51         1.50         14541519.00         2066893.41           5400.00         23.80         91.99         5084.87         -53.14         1531.13         1532.05         1.50         14541517.56         2066934.93           5500.00         22.30         91.99         5176.89         -54.49         1570.26         1571.20         1.50         14541516.21         2066974.06           5600.00         20.80         91.99         5269.89         -55.77         1606.96         1607.93         1.50         14541513.74         2067045.02           5800.00         17.80         91.99         5458.64         -58.06         16   |         |       |       |         |        |         |         |      |             |            |                |
| 5200.00         26.80         91.99         4904.07         -50.17         1445.73         1446.60         1.50         14541520.53         2066849.53           5237.92         26.23         91.99         4938.00         -50.76         1462.65         1463.53         1.50         14541519.94         2066866.45         WASATCH           5300.00         25.30         91.99         4993.91         -51.70         1489.61         1490.51         1.50         14541519.00         2066893.41           5400.00         23.80         91.99         5084.87         -53.14         1531.13         1532.05         1.50         14541517.56         2066934.93           5500.00         22.30         91.99         5176.89         -54.49         1570.26         1571.20         1.50         14541516.21         2066974.06           5600.00         20.80         91.99         5269.89         -55.77         1606.96         1607.93         1.50         14541513.74         2067010.76           5700.00         19.30         91.99         5363.83         -56.96         1641.22         1642.21         1.50         14541513.74         2067045.02           5800.00         17.80         91.99         5458.64         -58.06         16   |         |       |       |         |        |         |         |      |             |            |                |
| 5300.00       25.30       91.99       4993.91       -51.70       1489.61       1490.51       1.50       14541519.00       2066893.41         5400.00       23.80       91.99       5084.87       -53.14       1531.13       1532.05       1.50       14541517.56       2066934.93         5500.00       22.30       91.99       5176.89       -54.49       1570.26       1571.20       1.50       14541516.21       2066974.06         5600.00       20.80       91.99       5269.89       -55.77       1606.96       1607.93       1.50       14541514.93       2067010.76         5700.00       19.30       91.99       5363.83       -56.96       1641.22       1642.21       1.50       14541513.74       2067045.02         5800.00       17.80       91.99       5458.64       -58.06       1673.01       1674.02       1.50       14541512.64       2067076.81         5900.00       16.30       91.99       5554.24       -59.08       1702.31       1703.33       1.50       14541511.62       2067106.11         6000.00       14.80       91.99       5650.58       -60.01       1729.09       1730.13       1.50       14541510.69       2067132.89  |         |       |       |         |        |         |         |      |             |            |                |
| 5300.00       25.30       91.99       4993.91       -51.70       1489.61       1490.51       1.50       14541519.00       2066893.41         5400.00       23.80       91.99       5084.87       -53.14       1531.13       1532.05       1.50       14541517.56       2066934.93         5500.00       22.30       91.99       5176.89       -54.49       1570.26       1571.20       1.50       14541516.21       2066974.06         5600.00       20.80       91.99       5269.89       -55.77       1606.96       1607.93       1.50       14541514.93       2067010.76         5700.00       19.30       91.99       5363.83       -56.96       1641.22       1642.21       1.50       14541513.74       2067045.02         5800.00       17.80       91.99       5458.64       -58.06       1673.01       1674.02       1.50       14541512.64       2067076.81         5900.00       16.30       91.99       5554.24       -59.08       1702.31       1703.33       1.50       14541511.62       2067106.11         6000.00       14.80       91.99       5650.58       -60.01       1729.09       1730.13       1.50       14541510.69       2067132.89  | 5237 02 | 26.23 | 91 99 | 4938 NN | -50 7B | 1462 65 | 1463 53 | 1.50 | 14541510 04 | 2066866 45 | WASATCH        |
| 5400.00       23.80       91.99       5084.87       -53.14       1531.13       1532.05       1.50       14541517.56       2066934.93         5500.00       22.30       91.99       5176.89       -54.49       1570.26       1571.20       1.50       14541516.21       2066974.06         5600.00       20.80       91.99       5269.89       -55.77       1606.96       1607.93       1.50       14541514.93       2067010.76         5700.00       19.30       91.99       5363.83       -56.96       1641.22       1642.21       1.50       14541513.74       2067045.02         5800.00       17.80       91.99       5458.64       -58.06       1673.01       1674.02       1.50       14541512.64       2067076.81         5900.00       16.30       91.99       5554.24       -59.08       1702.31       1703.33       1.50       14541511.62       2067106.11         6000.00       14.80       91.99       5650.58       -60.01       1729.09       1730.13       1.50       14541510.69       2067132.89   |         |       |       |         |        |         |         |      |             |            | . 17 10/11 011 |
| 5500.00       22.30       91.99       5176.89       -54.49       1570.26       1571.20       1.50       14541516.21       2066974.06         5600.00       20.80       91.99       5269.89       -55.77       1606.96       1607.93       1.50       14541514.93       2067010.76         5700.00       19.30       91.99       5363.83       -56.96       1641.22       1642.21       1.50       14541513.74       2067045.02         5800.00       17.80       91.99       5458.64       -58.06       1673.01       1674.02       1.50       14541512.64       2067076.81         5900.00       16.30       91.99       5554.24       -59.08       1702.31       1703.33       1.50       14541511.62       2067106.11         6000.00       14.80       91.99       5650.58       -60.01       1729.09       1730.13       1.50       14541510.69       2067132.89  |         |       |       |         |        |         |         |      |             |            |                |
| 5600.00     20.80     91.99     5269.89     -55.77     1606.96     1607.93     1.50     14541514.93     2067010.76       5700.00     19.30     91.99     5363.83     -56.96     1641.22     1642.21     1.50     14541513.74     2067045.02       5800.00     17.80     91.99     5458.64     -58.06     1673.01     1674.02     1.50     14541512.64     2067076.81       5900.00     16.30     91.99     5554.24     -59.08     1702.31     1703.33     1.50     14541511.62     2067106.11       6000.00     14.80     91.99     5650.58     -60.01     1729.09     1730.13     1.50     14541510.69     2067132.89   |         |       |       |         |        |         |         |      |             |            |                |
| 5700.00       19.30       91.99       5363.83       -56.96       1641.22       1642.21       1.50       14541513.74       2067045.02         5800.00       17.80       91.99       5458.64       -58.06       1673.01       1674.02       1.50       14541512.64       2067076.81         5900.00       16.30       91.99       5554.24       -59.08       1702.31       1703.33       1.50       14541511.62       2067106.11         6000.00       14.80       91.99       5650.58       -60.01       1729.09       1730.13       1.50       14541510.69       2067132.89  |         |       |       |         |        |         |         |      |             |            |                |
| 5800.00 17.80 91.99 5458.64 -58.06 1673.01 1674.02 1.50 14541512.64 2067076.81 5900.00 16.30 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541511.62 2067106.11 6000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.69 2067132.89   |         | 40.00 |       |         |        |         |         |      |             | 0007017.5  |                |
| 5900.00 16.30 91.99 5554.24 -59.08 1702.31 1703.33 1.50 14541511.62 2067106.11 6000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.69 2067132.89  |         |       |       |         |        |         |         |      |             |            |                |
| 6000.00 14.80 91.99 5650.58 -60.01 1729.09 1730.13 1.50 14541510.69 2067132.89   |         |       |       |         |        |         |         |      |             |            |                |
|  |         |       |       |         |        |         |         |      |             |            |                |
| 0.001 14541509.85 206/15/.15 co.00- 86.15/.15 206/15/.15   |         |       |       |         |        |         |         |      |             |            |                |
|  | 00.0018 | 13.30 | 91.99 | 5/4/.58 | -60.85 | 1753.35 | 1/54.41 | 1.50 | 14041009.85 | 200/15/.15 |                |
|  |         |       | -     |         |        |         |         |      |             |            |                |



Company: Anadarko-Kerr-McGee Field:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 922-1813S PAD IJNOP

Site:

Well: 18138

Wellpath: 1

Date: 9/28/2007

Co-ordinate(NE) Reference:

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Time: 08:21:46 Site: NBU 922-1813S PAD IJNOP, Grid Nort

SITE 4876.0 Well (0.00N,0.00E,91.99Azi) Minimum Curvature

Db: Sybase

| Survey   |             |             |              |                  |           |          |                  |             |            |              |
|----------|-------------|-------------|--------------|------------------|-----------|----------|------------------|-------------|------------|--------------|
| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft    | N/S<br>ft        | E/W<br>ft | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft  | MapE<br>ft | Comment      |
| 6110.55  | 13,14       | 91.99       | 5757.85      | -60.93           | 1755.76   | 1756.82  | 1.50             | 14541509.77 | 2067159.56 | ENTER TARGET |
| 6200.00  | 11.80       | 91.99       | 5845.19      | -61.60           | 1775.06   | 1776.13  | 1.50             | 14541509.10 | 2067178.86 |              |
| 6300.00  |             | 91.99       | 5943.34      | -62.27           | 1794.21   | 1795.29  | 1.50             | 14541508.43 | 2067198.01 |              |
| 6400.00  |             | 91.99       | 6041.95      | -62.84           | 1810.79   | 1811.88  | 1.50             | 14541507.86 | 2067214.59 |              |
| 6500.00  |             | 91.99       | 6140.96      | -63.33           | 1824.78   | 1825.88  | 1.50             | 14541507.37 | 2067228.58 |              |
|          | 7.00        | 01.00       | 0110.00      | 00.00            | 102 1.10  | 1020.00  | 1.00             | 11011007.07 | 2007220.00 |              |
| 6600.00  | 5.80        | 91.99       | 6240.31      | -63.72           | 1836.17   | 1837.28  | 1.50             | 14541506.98 | 2067239.97 |              |
| 6700.00  | 4.30        | 91.99       | 6339.92      | -64.03           | 1844.97   | 1846.08  | 1.50             | 14541506.67 | 2067248.77 |              |
| 6800.00  | 2.80        | 91.99       | 6439.72      | -64.24           | 1851.15   | 1852.27  | 1.50             | 14541506.46 | 2067254.95 |              |
| 6900.00  | 1.30        | 91.99       | 6539.65      | -64.37           | 1854.72   | 1855.84  | 1.50             | 14541506.33 | 2067258.52 |              |
| 6986.50  |             | 91.99       | 6626.15      | -64.40           | 1855.70   | 1856.82  | 1.50             | 14541506.30 | 2067259.50 | HOLD         |
|          |             |             |              |                  |           | 1050.00  |                  |             |            |              |
| 7000.00  |             | 91.99       | 6639.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7100.00  |             | 91.99       | 6739.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7200.00  |             | 91.99       | 6839.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7300.00  | 0.00        | 91.99       | 6939.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7400.00  | 0.00        | 91.99       | 7039.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7500.00  | 0.00        | 91.99       | 7139.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7600.00  |             | 91.99       | 7139.65      | -64.40<br>-64.40 | 1855.70   | 1856.82  |                  |             |            |              |
|          |             |             |              |                  |           |          | 0.00             | 14541506.30 | 2067259.50 |              |
| 7700.00  |             | 91.99       | 7339.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7800.00  |             | 91.99       | 7439.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7900.00  | 0.00        | 91.99       | 7539.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 7952.35  | 0.00        | 91.99       | 7592.00      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 | MESAVERDE    |
| 8000.00  | 0.00        | 91.99       | 7639.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 8100.00  |             | 91.99       | 7739.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 8200.00  |             | 91.99       | 7839.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 8300.00  |             | 91.99       | 7939.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
|          | 0.00        | 01.00       | , 000.00     | 54.10            | 1000.10   | 1000.02  | 0.00             | 11011000.00 | 2007200.00 |              |
| 8400.00  | 0.00        | 91.99       | 8039.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 8500.00  | 0.00        | 91.99       | 8139.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 8600.00  | 0.00        | 91.99       | 8239.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 | 1            |
| 8700.00  | 0.00        | 91.99       | 8339.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 8800.00  | 0.00        | 91.99       | 8439.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
|          |             |             |              |                  |           |          |                  |             |            |              |
| 8900.00  |             | 91.99       | 8539.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9000.00  |             | 91.99       | 8639.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9100.00  |             | 91.99       | 8739.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9200.00  |             | 91.99       | 8839.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9300.00  | 0.00        | 91.99       | 8939.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9400.00  | 0.00        | 91.99       | 9039.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9500.00  |             | 91.99       | 9139.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9600.00  |             | 91.99       | 9239.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 9700.00  |             |             |              |                  |           | 1856.82  | 0.00             |             |            |              |
|          |             | 91.99       | 9339.65      | -64.40           | 1855.70   |          |                  | 14541506.30 | 2067259.50 |              |
| 9800.00  | 0.00        | 91.99       | 9439.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 | ļ            |
| 9900.00  | 0.00        | 91.99       | 9539.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 |              |
| 10000.00 |             | 91.99       | 9639.65      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 | İ            |
| 10030.35 |             | 91.99       | 9670.00      | -64.40           | 1855.70   | 1856.82  | 0.00             | 14541506.30 | 2067259.50 | PBHL         |
|          | _           |             | <del>-</del> | - · ·            |           |          |                  |             |            |              |

| Ta | rgets |
|----|-------|
|----|-------|

| Name             | Description<br>Dip. | Dir. | ΓVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | Map<br>Northing<br>ft | Map<br>Easting<br>ft |    | Latitude><br>Min Sec | < Long<br>Deg Min | •       |
|------------------|---------------------|------|-----------|-------------|-------------|-----------------------|----------------------|----|----------------------|-------------------|---------|
| PBHL -Circle (Ra |                     | 967  | 70.00     | -64.40      | 1855.70     | 14541506.30           | 2067259.50           | 40 | 1 56.740 N           | 109 28 3          | 0.679 W |

<sup>-</sup>Plan hit target



Company: Anadarko-Kerr-McGee Field:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 922-18i3S PAD IJNOP

Site:

Well: Wellpath: 1

18138

Date: 9/28/2007

Time: 08:21:46 Co-ordinate(NE) Reference:

e: 08:21:46 Page: 4 Site: NBU 922-18I3S PAD IJNOP, Grid Nort

Vertical (TVD) Reference: SITE 4876.0 Section (VS) Reference: Survey Calculation Method:

Well (0.00N,0.00E,91.99Azi)

Minimum Curvature

Db: Sybase

# **Casing Points**

| MD<br>ft | TVD<br>ft | Diameter<br>in | Hole Size<br>in | Name   |  |
|----------|-----------|----------------|-----------------|--------|--|
| 2730.17  | 2700.00   | 9.62           | 12.25           | 9 5/8" |  |

### Annotation

| MD<br>ft | TVD<br>ft |              |  |
|----------|-----------|--------------|--|
| 300.00   | 300.00    | NUDGE        |  |
| 966.67   | 963.29    | HOLD         |  |
| 2790.17  | 2759.09   | BUILD        |  |
| 3590.17  | 3507.03   | HOLD         |  |
| 4986.50  | 4716.29   | DROP         |  |
| 6110.55  | 5757.85   | ENTER TARGET |  |
| 6986.50  | 6626.15   | HOLD         |  |
| 10030.35 | 9670.00   | PBHL         |  |

### **Formations**

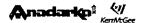
| MD<br>ft | TVD<br>ft | Formations | Lithology | Dip Angle<br>deg | Dip Direction deg |
|----------|-----------|------------|-----------|------------------|-------------------|
| 5237.92  | 4938.00   | WASATCH    |           | 0.00             | 0.00              |
| 7952.35  | 7592.00   | MESAVERDE  |           | 0.00             | 0.00              |



# **Weatherford Drilling Services**

GeoDec v4.1.130

| Report Date:           | September 24,    | 2007      | ·                     |                 |          |
|------------------------|------------------|-----------|-----------------------|-----------------|----------|
| Job Number:            |                  |           |                       |                 |          |
| Customer:              | ANADARKO-KERR    | R McGEE   | •                     |                 |          |
| Well Name:             | NBU 922-18I3S    | ;         |                       |                 |          |
| API Number:            |                  |           |                       |                 |          |
| Rig Name:              |                  |           |                       |                 |          |
|                        | UNITAH COUNTY    | , UTAH    |                       |                 |          |
| Block:                 |                  |           |                       |                 |          |
| Engineer:              | R JOYNER         |           |                       |                 |          |
| Universal Transverse   | Mercator         |           | Geodetic Latitude / L | ongitude        |          |
| System: Zone 12N (1    | 14 W to 108 W)   |           | System: Latitude / Lo | ongitude        |          |
| Projection: Transvers  | e Mercator/Gauss | s Kruger  | Projection: Geodetic  | Latitude and Le | ongitude |
| Datum: NAD 1927 (N     | IADCON CONUS     | 5)        | Datum: NAD 1927 (I    | NADCON CON      | US)      |
| Ellipsoid: Clarke 1866 | 6                |           | Ellipsoid: Clarke 186 | 66              |          |
| North/South 145415     | 70.700 USFT      |           | Latitude 40.0326916   | 6 DEG           |          |
| East/West 2065403.     | 800 USFT         |           | Longitude -109.481    | 8116 DEG        |          |
| Grid Convergence:      | 97672956°        |           | J                     |                 |          |
| Total Correction: +10  |                  |           |                       |                 |          |
| Geodetic Location W    | GS84 I           | Elevation | = 1482.0 Meter        | S               |          |
| Latitude = 40          | .03269° N        | 40°       | 1 min 57:690 se       | c ·             |          |
| Longitude = 109        | .48181° W        | 109° 2    | 8 min 54.522 se       | С               |          |
| Magnetic Declination   | = +11.568        | 0° [7     | True North Offse      | :t]             |          |
| Local Gravity =        | .9995            | g         |                       |                 |          |
| Local Field Strength=  | 52727            | nT        | Mag Vector X =        | 20994 nT        |          |
| Dip =                  | 66.0200          | 0         | Mag Vector Y =        | 4297 nT         |          |
| Model File:            | bggm2006         |           | Mag Vector Z =        | 48176 nT        |          |
| Spud Date:             | Sep 24, 2        | 007       | Mag Vector H =        | 21430 nT        |          |
|                        |                  |           | <del> </del>          |                 |          |
| Signed:                |                  |           | Date:                 |                 |          |



# **Weatherford Drilling Services Anticollision Report**



Company: Field:

Anadarko-Kerr-McGee

Date: 9/24/2007 UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Co-ordinate(NE) Reference:

Time: 10:58:47

Page:

**NBU 922-1813S PAD IJNOP** Reference Site: Reference Well: 1813\$

Vertical (TVD) Reference:

Site: NBU 922-1813S PAD IJNOP, Grid Nort

SITE 4876.0

Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria

Interpolation Method: MD 0.00 to Depth Range:

Maximum Radius: 10000.00 ft

Yes

Reference Wellpath: 1

Interval:

Reference: Error Model: Scan Method:

Plan: Plan #1 18I3S ISCWSA Ellipse

Closest Approach 3D

Error Surface:

Ellipse

Plan:

Plan #1 1813S

Date Composed:

9/21/2007

Version: Tied-to:

From Surface

Principal: Summary

Offset Wellpath -Site

Wellpath

Reference Offset MD MD

ft

Ctr-Ctr Edge Separation Distance Distance Factor ft ft

Warning

NBU 922-18P2S PADI8P2S

1 V0 Plan: Plan #1 18P

2900.00 2899.87

ft

81.03 62.44

Site:

Well:

NBU 922-18P2S PAD IJNOP

18P2S Wellpath:

1 V0 Plan: Plan #1 18P2S V1

Inter-Site Error:

0.00

4.36

| Re<br>MD | ference<br>TVD | Of<br>MD | ffset<br>TVD | Semi-M<br>Ref | lajor Axis<br>Offset | TFO-HS | Offset  | Location<br>East | Ctr-Ctr<br>Distance | Edge S<br>Distance | eparation<br>Factor | Warning |
|----------|----------------|----------|--------------|---------------|----------------------|--------|---------|------------------|---------------------|--------------------|---------------------|---------|
| ft       | ft             | ft       | ft           | ft            | ft                   | deg    | ft      | ft               | ft                  | ft                 |                     | J       |
| 0.00     | 0.00           | 0.00     | 0.00         | 0.00          | 0.00                 | 232.33 | -6.10   | -7.90            | 9.98                |                    |                     | No Data |
| 100.00   |                | 100.00   | 100.00       | 0.09          |                      | 232.33 | -6.10   | -7.90            | 9.98                | 9.80               | 56.07               |         |
| 200.00   |                | 200.00   | 200.00       | 0.30          |                      | 232.33 | -6.10   | -7.90            | 9.98                | 9.38               | 16.72               |         |
| 300.00   |                | 300.00   | 300.00       | 0.51          |                      | 232.33 | -6.10   | -7.90            | 9.98                | 8.97               | 9.83                |         |
| 400.00   | 399.99         | 400.17   | 400.15       | 0.72          | 0.72                 | 139.35 | -6.39   | -6.62            | 10.15               | 8.72               | 7.07                |         |
| 500.00   |                | 500.33   | 500.24       | 0.93          |                      | 136.59 | -7.25   | -2.78            | 10.69               | 8.83               | 5.74                |         |
| 600.00   |                | 600.48   | 600.17       | 1.16          |                      | 132.57 | -8.69   | 3.63             | 11.63               | 9.32               | 5.05                |         |
| 700.00   |                | 700.63   | 699.89       | 1.40          |                      | 127.95 | -10.71  | 12.58            | 13.02               | 10.25              | 4.70                |         |
| 800.00   |                | 800.76   | 799.33       | 1.67          |                      | 123.31 | -13.29  | 24.08            | 14.90               | 11.62              | 4.54                |         |
| 900.00   | 897.54         | 900.87   | 898.39       | 1.97          | 1.95                 | 119.05 | -16.45  | 38.11            | 17.30               | 13.44              | 4.48                |         |
| 1000.00  |                | 1000.91  | 997.01       | 2.30          |                      | 115.40 | -20.14  | 54.52            | 20.20               | 15.69              | 4.48                |         |
| 1100.00  |                | 1100.86  | 1095.44      | 2.66          |                      | 112.66 | -23.95  | 71.45            | 23.26               | 18.07              | 4.48                |         |
| 1200.00  |                | 1200.81  | 1193.87      | 3.02          |                      | 110.56 | -27.75  | 88.38            | 26.36               | 20.47              | 4.47                |         |
| 1300.00  |                | 1300.76  | 1292.30      | 3.39          |                      | 108.90 | -31.56  | 105.32           | 29.50               | 22.88              | 4.46                |         |
| 1400.00  | 1390.04        | 1400.70  | 1390.73      | 3.76          | 3.65                 | 107.56 | -35.37  | 122.25           | 32.65               | 25.31              | 4.45                | •       |
| 1500.00  |                | 1500.65  | 1489.16      | 4.13          |                      | 106.46 | -39.18  | 139.18           | 35.81               | 27.75              | 4.44                |         |
| 1600.00  |                | 1600.60  | 1587.59      | 4.51          |                      | 105.54 | -42.99  | 156.11           | 38.99               | 30.19              | 4.43                |         |
| 1700.00  |                | 1700.55  | 1686.02      | 4.89          |                      | 104.75 | -46.80  | 173.05           | 42.18               | 32.64              | 4.42                |         |
| 1800.00  |                | 1800.50  | 1784.45      | 5.26          |                      | 104.08 | -50.60  | 189.98           | 45.37               | 35.09              | 4.41                |         |
| 1900.00  | 1882.44        | 1900.44  | 1882.88      | 5.64          | 5.45                 | 103.50 | -54.41  | 206.91           | 48.57               | 37.54              | 4.41                |         |
| 2000.00  |                | 2000.39  | 1981.31      | 6.03          |                      | 102.98 | -58.22  | 223.85           | 51.77               | 40.00              | 4.40                |         |
| 2100.00  |                | 2100.34  | 2079.74      | 6.41          |                      | 102.53 | -62.03  | 240.78           | 54.98               | 42.46              | 4.39                |         |
| 2200.00  |                | 2200.29  | 2178.17      | 6.79          |                      | 102.13 | -65.84  | 257.71           | 58.19               | 44.92              | 4.39                |         |
| 2300.00  |                | 2300.23  | 2276.59      | 7.17          |                      | 101.77 | -69.65  | 274.64           | 61.40               | 47.39              | 4.38                |         |
| 2400.00  | 2374.84        | 2400.18  | 2375.02      | 7.56          | 7.28                 | 101.44 | -73.45  | 291.58           | 64.61               | 49.85              | 4.38                |         |
| 2500.00  |                | 2500.13  | 2473.45      | 7.94          |                      | 101.15 | -77.26  | 308.51           | 67.83               | 52.32              | 4.37                |         |
| 2600.00  |                | 2600.08  | 2571.88      | 8.33          |                      | 100.88 | -81.07  | 325.44           | 71.05               | 54.79              | 4.37                |         |
| 2700.00  |                | 2700.02  | 2670.31      | 8.71          |                      | 100.64 | -84.88  | 342.38           | 74.27               | 57.26              | 4.37                |         |
| 2800.00  |                | 2799.97  | 2768.74      | 9.09          |                      | 100.40 | -88.69  | 359.32           | 77.49               | 59.72              | 4.36                |         |
| 2900.00  | 2866.93        | 2899.87  | 2866.63      | 9.50          | 9.15                 | 99.49  | -93.05  | 378.70           | 81.03               | 62.44              | 4.36                |         |
| 3000.00  |                | 2999.68  | 2963.49      | 9.98          | 9.61                 | 98.58  | -98.33  | 402.21           | 85.38               | 65.85              | 4.37                |         |
| 3100.00  |                | 3099.40  | 3059.11      | 10.52         | 10.13                |        |         | 429.77           | 90.52               | 69.93              | 4.39                |         |
| 3200.00  |                | 3199.02  | 3153.32      | 11.13         | 10.71                |        | -111.63 | 461.34           | 96.46               | 74.66              | 4.43                |         |
| 3300.00  |                | 3298.52  | 3245.93      | 11.82         | 11.37                |        | -119.61 | 496.82           | 103.17              | 80.04              | 4.46                |         |
| 3400.00  | 3340.25        | 3397.92  | 3336.78      | 12.57         | 12.08                | 95.48  | -128.46 | 536.15           | 110.63              | 86.03              | 4.50                |         |
| 3500.00  | 3430.15        | 3497.19  | 3425.68      | 13.41         | 12.87                | 94.86  | -138.15 | 579.23           | 118.84              | 92.62              | 4.53                |         |



# Weatherford Drilling Services

# **Anticollision Report**



Company:

Anadarko-Kerr-McGee

Date: 9/24/2007 UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Time: 10:58:47

Page:

Field: Reference Site:

Reference Well:

Reference Wellpath: 1

NBU 922-1813S PAD IJNOP

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Site: NBU 922-1813S PAD IJNOP, Grid Nort SITE 4876.0

Db: Sybase

Site: Well: NBU 922-18P2S PAD IJNOP

18P2S

Wellpath: 1 V0 Plan: Plan #1 18P2S V1

18l3S

Inter-Site Error:

0.00 ft

| Wellpath:                     | 1 VU Plan          | : Plan #1 1        | 8P25 V1            |                                 |                |        |                    |                         | Inter-Sit        | e Error: | 0.00              | ft      |
|-------------------------------|--------------------|--------------------|--------------------|---------------------------------|----------------|--------|--------------------|-------------------------|------------------|----------|-------------------|---------|
| Reference                     |                    | Offset             |                    | Semi-Major Axis Offset Location |                |        |                    | Ctr-Ctr Edge Separation |                  | .,       |                   |         |
| MD                            | TVD                | MD                 | TVD                | Ref                             |                |        | S North            | East                    |                  | Distance | Factor            | Warning |
| ft                            | ft                 | ft                 | ft                 | ft                              | ft             | deg    | ft                 | ft                      | ft               | ft       |                   |         |
| 3600.00                       | 3518.05            | 3596.37            | 3512.51            | 14.32                           | 13.73          | 94.31  | -148.66            | 625.97                  | 127.77           | 99.78    | 4.56              |         |
| 3700.00                       | 3604.67            | 3695.93            | 3598.73            | 15.28                           | 14.63          |        | -159.58            | 674.54                  | 137.07           |          | 4.59              |         |
| 3800.00                       | 3691.27            | 3795.50            | 3684.96            | 16.26                           | 15.55          |        | -170.51            | 723.11                  | 146.37           |          | 4.61              |         |
| 3900.00                       | 3777.87            | 3895.07            | 3771.19            | 17.24                           | 16.46          |        | -181.43            | 771.68                  | 155.68           |          | 4.63              |         |
|                               |                    |                    |                    |                                 |                |        |                    |                         |                  |          |                   |         |
| 4000.00                       | 3864.48            | 3994.63            | 3857.41            | 18.23                           | 17.39          | 94.35  | -192.35            | 820.25                  | 164.98           | 129.42   | 4.64              |         |
| 4100.00                       | 3951.08            | 4094.20            | 3943.64            | 19.22                           | 18.32          |        | -203.28            | 868.82                  | 174.28           |          | 4.65              |         |
| 4200.00                       | 4037.68            | 4193.76            | 4029.87            | 20.22                           | 19.26          |        | -214.20            | 917.39                  | 183.58           |          | 4.66              |         |
| 4300.00                       | 4124.28            | 4293.33            | 4116.10            | 21.23                           | 20.20          | 94.39  | -225.12            | 965.96                  | 192.89           | 151.53   | 4.66              |         |
| 4400.00                       | 4210.89            | 4392.90            | 4202.32            | 22.23                           | 21.14          | 94.40  | -236.05            | 1014.53                 | 202.19           | 158.88   | 4.67              |         |
|                               |                    |                    |                    |                                 |                |        |                    |                         |                  |          |                   |         |
| 4500.00                       | 4297.49            | 4492.46            | 4288.55            | 23.25                           | 22.09          | 94.41  | -246.97            | 1063.10                 | 211.49           | 166.23   | 4.67              |         |
| 4600.00                       | 4384.09            | 4592.03            | 4374.78            | 24.26                           | 23.04          | 94.42  | -257.90            | 1111.67                 | 220.80           | 173.57   | 4.68              |         |
| 4700.00                       | 4470.69            | 4691.60            | 4461.00            | 25.27                           | 23.99          |        | -268.82            |                         | 230.10           |          | 4.68              |         |
| 4800.00                       | 4557.30            | 4791.16            | 4547.23            | 26.29                           | 24.94          |        | -279.74            |                         | 239.40           |          | 4.68              |         |
| 4900.00                       | 4643.90            | 4890.73            | 4633.46            | 27.31                           | 25.90          | 94.44  | -290.67            | 1257.38                 | 248.71           | 195.57   | 4.68              |         |
|                               |                    |                    |                    |                                 |                |        |                    |                         |                  |          |                   |         |
| 5000.00                       | 4730.50            | 4990.29            | 4719.68            | 28.33                           | 26.86          |        | -301.59            |                         | 258.01           |          | 4.68              |         |
| 5100.00                       | 4817.74            | 5089.98            | 4806.04            | 29.18                           | 27.79          |        | -312,52            |                         | 267.21           |          | 4.70              |         |
| 5200.00                       | 4906.24            | 5190.23            | 4893.76            | 29.84                           | 28.48          |        | -323.16            |                         | 276.06           |          | 4.74              |         |
| 5300.00                       | 4995.92            | 5290.58            | 4982.83            | 30.48                           | 29.14          |        | -333.31            |                         | 284.50           |          | 4.78              |         |
| 5400.00                       | 5086.72            | 5391.05            | 5073.17            | 31.08                           | 29.76          | 93.51  | -342.95            | 1489.85                 | 292.51           | 231.79   | 4.82              |         |
| EE00 00                       | E470.00            | E404.60            | E164.70            | 24.05                           | 20.25          | 02.27  | 252.00             | 1520 42                 | 300.08           | 220 22   | 4 OF              |         |
| 5500.00                       | 5178.60            | 5491.62            | 5164.73            | 31.65                           | 30.35          |        | -352.08<br>-360.68 |                         |                  |          | 4.85              |         |
| 5600.00                       | 5271.47            | 5592.29            | 5257.46            | 32.18                           | 30.90          |        |                    |                         | 307.22<br>313.91 |          | 4.88<br>4.91      |         |
| 5700.00<br>5800.00            | 5365.29<br>5459.97 | 5693.06            | 5351.28<br>5446.13 | 32.67<br>33.13                  | 31.42<br>31.90 |        | -368.75<br>-376.28 |                         | 320.14           |          | 4.91<br>4.94      |         |
| 5900.00                       | 5555.47            | 5793.94<br>5894.90 | 5541.94            | 33.55                           | 32.34          |        | -383.26            |                         | 325.92           |          | 4.96              |         |
| 5900.00                       | 5555.47            | 3694.90            | 3341.94            | 33.55                           | 32.34          | 92.31  | -303.20            | 1009.10                 | 323.92           | 200.24   | 4.90              |         |
| 6000.00                       | 5651.71            | 5995.96            | 5638.65            | 33.93                           | 32.75          | 92 15  | -389.70            | 1697 71                 | 331.24           | 264 79   | 4.98              |         |
| 6100.00                       | 5748.63            | 6097.11            | 5736.19            | 34.27                           | 33.11          |        | -395.57            |                         | 336.10           |          | 5.01              |         |
| 6200.00                       | 5846.16            | 6198.34            | 5834.48            | 34.56                           | 33.43          |        | -400.88            |                         | 340.48           |          | 5.03              |         |
| 6300.00                       | 5944.23            | 6299.65            | 5933.45            | 34.82                           | 33.71          |        | -405.62            |                         | 344.39           |          | 5.05              |         |
| 6400.00                       | 6042.78            | 6401.03            | 6033.04            | 35.04                           | 33.95          |        | -409.79            |                         | 347.83           |          | 5.06              |         |
|                               |                    |                    |                    |                                 |                |        |                    |                         |                  |          |                   |         |
| 6500.00                       | 6141.74            | 6502.49            | 6133.17            | 35.22                           | 34.16          | 91.09  | -413.37            | 1802.98                 | 350.78           | 281.74   | 5.08              | ,       |
| 6600.00                       | 6241.05            | 6604.01            | 6233.76            | 35.35                           | 34.32          | 90.87  | -416.38            | 1816.33                 | 353.26           |          | 5.10              |         |
| 6700.00                       | 6340.62            | 6705.60            | 6334.75            | 35.45                           | 34.44          | 90.65  | -418.79            | 1827.07                 | 355.25           |          | 5.11              |         |
| 6800.00                       | 6440.40            | 6807.24            | 6436.05            | 35.51                           | 34.52          |        | -420.62            |                         | 356.76           |          | 5.12              |         |
| 6900.00                       | 6540.32            | 6908.94            | 6537.58            | 35.53                           | 34.56          | 90.19  | -421.86            | 1840.70                 | 357.78           | 288.10   | 5.13              |         |
| <b></b>                       | 001001             | ma45 55            | 2005 25            |                                 |                | 00.55  | 100.55             | 40.45 ==                | 050.07           | 000 0=   |                   |         |
| 7000.00                       | 6640.31            | 7010.68            | 6639.28            | 35.51                           | 34.56          |        | -422.50            |                         | 358.31           |          | 5.15              |         |
| 7100.00                       | 6740.31            | 7111.71            | 6740.31            | 35.51                           |                |        | -422.60            |                         | 358.39           |          | 13.27             |         |
| 7200.00                       | 6840.31            | 7211.71            | 6840.31            | 35.55                           |                |        | -422.60            |                         | 358.39           |          | 13.17             |         |
| 7300.00                       | 6940.31            | 7311.71            | 6940.31            | 35.59                           |                |        | -422.60<br>422.60  |                         | 358.39           |          | 13.08             |         |
| 7400.00                       | 7040.31            | 7411.71            | 7040.31            | 35.63                           | 34.07          | 181.87 | -422.60            | 1044.00                 | 358.39           | 33U./¥   | 12.99             |         |
| 7500.00                       | 7140.31            | 7511 71            | 7140.31            | 35.67                           | 34.71          | 181 87 | -422 60            | 1844 00                 | 358.39           | 330.59   | 12.89             |         |
| 7600.00                       | 7140.31            | 7611.71            | 7140.31            | 35.71                           |                |        | -422.60<br>-422.60 |                         | 358.39           |          | 12.79             |         |
| 7700.00                       | 7340.31            | 7711.71            | 7340.31            | 35.76                           |                |        | -422.60<br>-422.60 |                         | 358.39           |          | 12.79             |         |
| 7800.00                       | 7440.31            | 7811.71            | 7440.31            | 35.80                           |                |        | <del>-422.60</del> |                         | 358.39           |          | 12.60             |         |
| 7900.00                       | 7540.31            | 7911.71            | 7540.31            | 35.85                           |                |        | -422.60            |                         | 358.39           |          | 12.50             |         |
|                               |                    |                    |                    |                                 |                |        |                    |                         |                  |          | · — · <del></del> |         |
| 8000.00                       | 7640.31            | 8011.71            | 7640.31            | 35.90                           | 34.95          | 181.87 | -422.60            | 1844.00                 | 358.39           | 329.50   | 12.41             |         |
| 8100.00                       | 7740.31            | 8111.71            | 7740.31            | 35.95                           |                |        | -422.60            |                         | 358.39           |          | 12.31             |         |
| 8200.00                       | 7840.31            | 8211.71            | 7840.31            | 36.00                           |                |        | -422.60            |                         | 358.39           |          | 12.21             |         |
| 8300.00                       | 7940.31            | 8311.71            | 7940.31            | 36.05                           |                |        | -422.60            |                         | 358.39           | 328.80   | 12.11             |         |
|                               | 0040.21            | 8411.71            | 8040.31            | 36.10                           | 35.15          | 181.87 | -422.60            | 1844.00                 | 358.39           | 328.55   | 12.01             |         |
| 8400.00                       | 8040.31            |                    |                    |                                 |                |        |                    |                         |                  |          |                   |         |
|                               |                    |                    |                    |                                 |                |        |                    |                         |                  |          |                   |         |
| 8400.00<br>8500.00<br>8600.00 | 8140.31<br>8240.31 | 8511.71<br>8611.71 | 8140.31<br>8240.31 | 36.15<br>36.21                  |                |        | -422.60<br>-422.60 |                         | 358.39<br>358.39 |          | 11.91<br>11.81    |         |



# Weatherford Drilling Services Anticollision Report



Company: Field:

Anadarko-Kerr-McGee

Date: 9/24/2007

Time: 10:58:47

Reference Site: Reference Well: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 922-1813S PAD IJNOP

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Site: NBU 922-18I3S PAD IJNOP, Grid Nort SITE 4876.0

Db: Sybase

Site:

18138 Reference Wellpath: 1 NBU 922-18P2S PAD IJNOP

Well: 18P2S Wellpath: 1 V0 Plan: Plan #1 18P2S V1

Inter-Site Error:

0.00

| Wellpath: 1 Vo Flati. Flati #1 10F25 VI |                    |                |                    |                     |                            |        |         | Titler-Site Effor: 0.00 it |        |        |                        |         |
|---|--------------------|----------------|--------------------|---------------------|----------------------------|--------|---------|----------------------------|--------|--------|------------------------|---------|
| Refe<br>MD<br>ft                        | rence<br>TVD<br>ft | Of<br>MD<br>ft | ffset<br>TVD<br>ft | Semi-M<br>Ref<br>ft | Iajor Axis<br>Offset<br>ft |        |         | Location<br>East<br>ft     |        |        | Separation<br>e Factor | Warning |
| 8700.00                                 | 8340.31            | 8711.71        | 8340.31            | 36.26               | 35.32                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 327.80 | 11.72                  |         |
| 8800.00                                 | 8440.31            | 8811.71        | 8440.31            | 36.32               | 35.38                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 327.54 | 11.62                  |         |
| 8900.00                                 | 8540.31            | 8911.71        | 8540.31            | 36.38               | 35.44                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 327.28 | 11.52                  |         |
| 9000.00                                 | 8640.31            | 9011.71        | 8640.31            | 36.44               | 35.50                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 327.02 | 11.42                  |         |
| 9100.00                                 | 8740.31            | 9111.71        | 8740.31            | 36.50               | 35.56                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 326.75 | 11.33                  |         |
| 9200.00                                 | 8840.31            | 9211.71        | 8840.31            | 36.56               | 35.63                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 326.48 | 11.23                  |         |
| 9300.00                                 | 8940.31            | 9311.71        | 8940.31            | 36.62               | 35.69                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 326.20 | 11,13                  |         |
| 9400.00                                 | 9040.31            | 9411.71        | 9040.31            | 36.68               | 35.76                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 325.93 | 11.04                  |         |
| 9500.00                                 | 9140.31            | 9511.71        | 9140.31            | 36.75               | 35.82                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 325.64 | 10.94                  |         |
| 9600.00                                 | 9240.31            | 9611.71        | 9240.31            | 36.81               | 35.89                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 325.36 | 10.85                  |         |
| 9700.00                                 | 9340.31            | 9711.71        | 9340.31            | 36.88               | 35.96                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 325.07 | 10.76                  |         |
| 9800.00                                 | 9440.31            | 9811.71        | 9440.31            | 36.95               | 36.03                      |        |         | 1844.00                    |        | 324.78 | 10.66                  |         |
| 9900.00                                 | 9540.31            | 9911.71        | 9540.31            | 37.02               | 36.10                      |        |         | 1844.00                    | 358.39 |        | 10.57                  |         |
| 10000.00                                | 9640.31            | 10011.71       | 9640.31            | 37.09               | 36.17                      | 181.87 | -422.60 | 1844.00                    | 358.39 | 324.20 | 10.48                  |         |
| 10029.69                                |                    | 10021.40       | 9650.00            | 37.11               | 36.18                      | 181.87 | -422.60 | 1844.00                    |        | 324.70 | 10.48                  |         |

# NBU 922-18I3S NW/SE SEC. 18, T9S, R22E UINTAH COUNTY, UTAH UTU-0461

### ONSHORE ORDER NO. 1

# MULTI-POINT SURFACE USE & OPERATIONS PLAN

# 1. Existing Roads:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

### 2. Planned Access Roads:

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

Approximately 0.25 +/- miles of access road is proposed. Please refer to the attached Topo Map B.

# 3. <u>Location of Existing Wells Within a 1-Mile Radius:</u>

Please refer to Topo Map C.

# 4. <u>Location of Existing & Proposed Facilities:</u>

Please see the Natural Buttes Unit SOP.

Approximately 1633' +/- of 8" steel pipeline is proposed from the location to an existing pipeline. Refer to the attached Topo Map D.

Approximately 672' +/- of 4" steel pipeline needs to be re-route around the location. Refer to the attached Topo Map D

Approximately 636'+/- of 4" steel pipeline needs to be re-route around the location. Refer to the attached Topo Map D.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

# 5. Location and Type of Water Supply:

Please see the Natural Buttes SOP.

# 6. Source of Construction Materials:

Please see the Natural Buttes SOP.

# 7. Methods of Handling Waste Materials:

Please see the Natural Buttes SOP.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E (Request is in lieu of filing Form 3160-5, after initial production).

# 8. Ancillary Facilities:

Please see the Natural Buttes SOP.

# 9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Culverts will be installed where needed.

A run off diversion for drainage will be constructed where needed.

The reserve pit will be lined. When the reserve pit is closed the pit liner will be buried below plow depth.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

# 10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

# 11. <u>Surface Ownership</u>:

The well pad and access road are located on lands owned by:

Ute Indian Tribe P.O. Box 70 Fort Duchesne, Utah 84026 (435) 722-5141

# 12. Other Information:

A Class III Archaeological Survey Report has been conducted for this location and submitted to the Ute Indian Tribe prior to the on-site inspection.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within boundaries of the unit.

# 13. Lessee's or Operator's Representative & Certification:

Sheila Ucphego Senior Land Admin Specialist Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435) 781-7024 Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Indian Affairs Nationwide Bond #RLB0005239, Bureau of Land Management Nationwide Bold #WYB000291 and State of Utah Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Sheila Upchego

11/2/2007
Date

# Kerr-McGee Oil & Gas Onshore LP NBU #922-18J3S, J1S, 13S, P2S, O1BS, P3S, O1CS, O3AS, O3DS, N2S, N2AS, N2CS SECTION 18, T9S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST: TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.25 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.25 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 47.6 MILES.

# Kerr-McGee Oil & Gas Onshore LP

NBU #922-18J3S, J1S, I3S, P2S, O1BS, P3S, O1CS, O3AS, O3DS, N2S, N2AS, N2CS

LOCATED IN UINTAH COUNTY, UTAH **SECTION 18, T9S, R22E, S.L.B.&M.** 

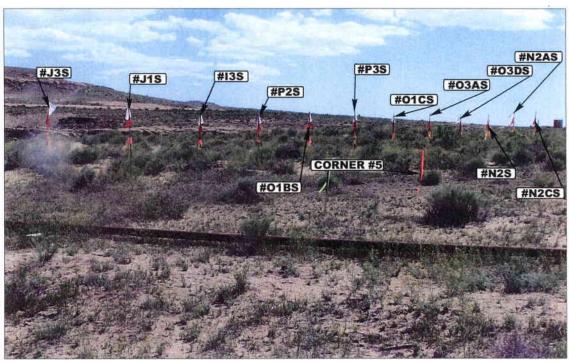


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: SOUTHEASTERLY

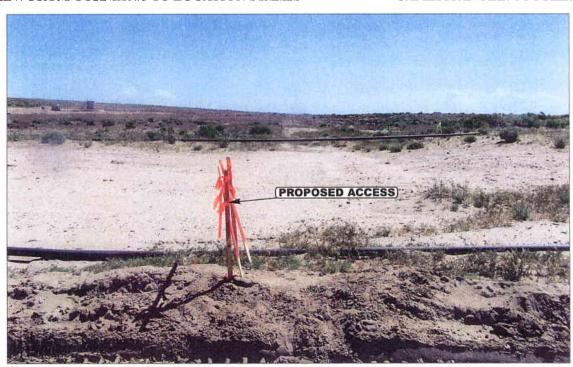


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY

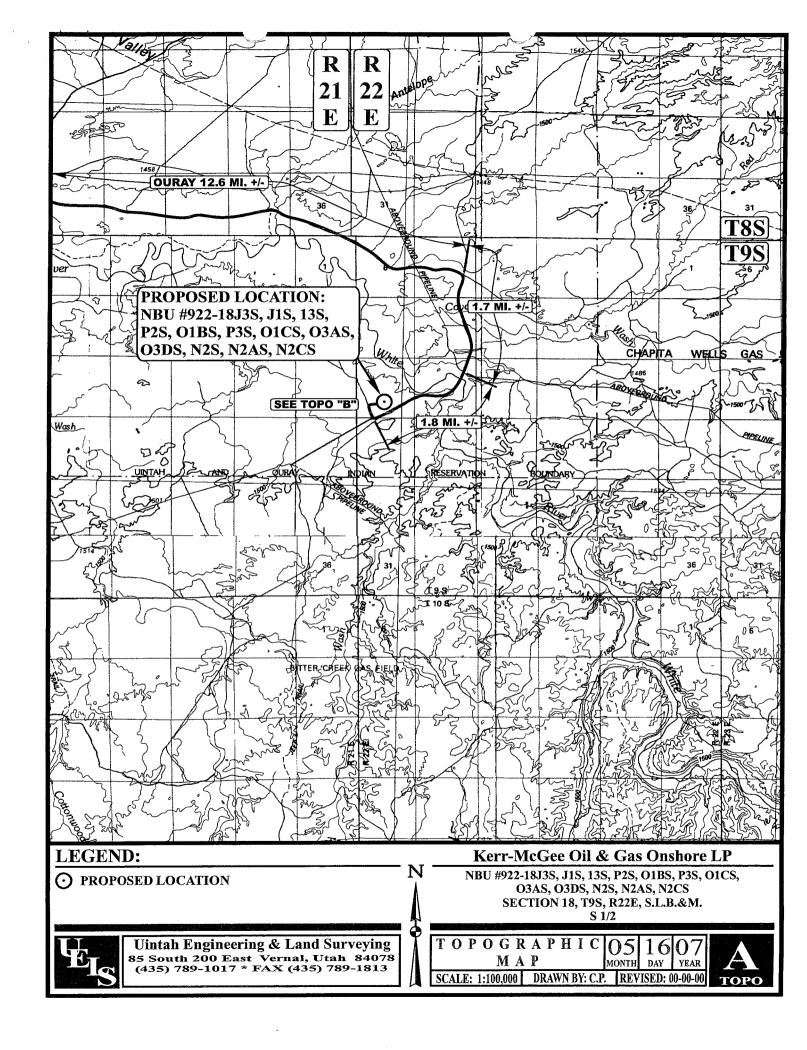


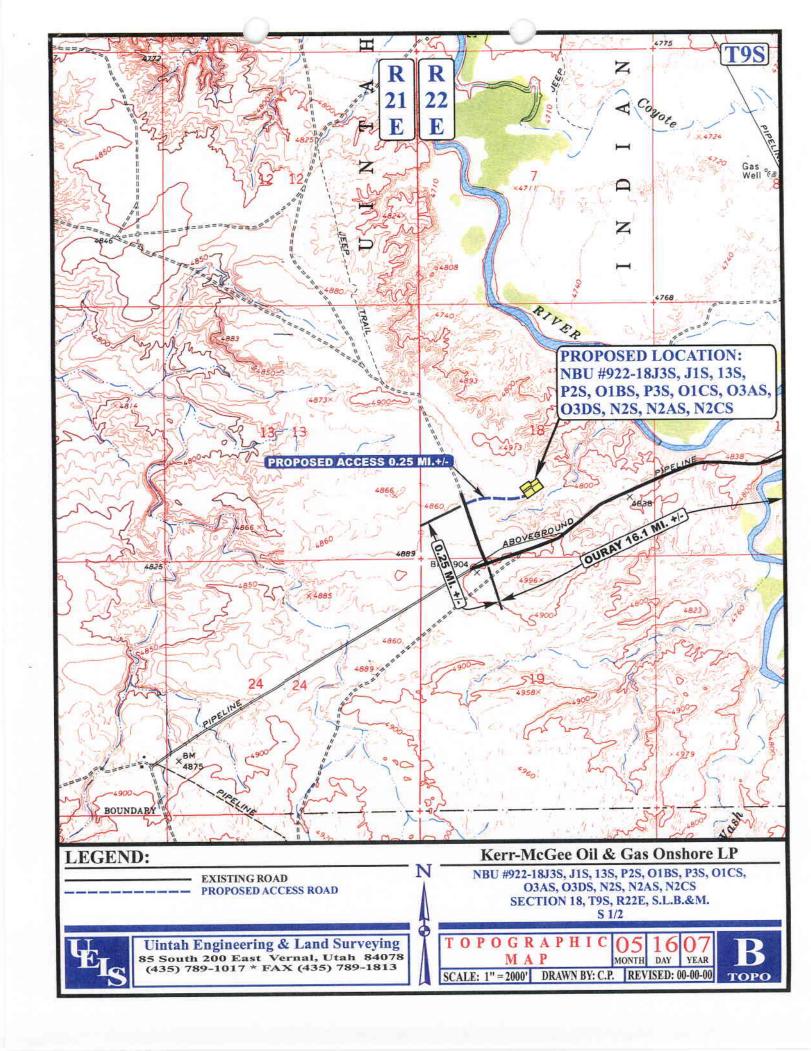
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

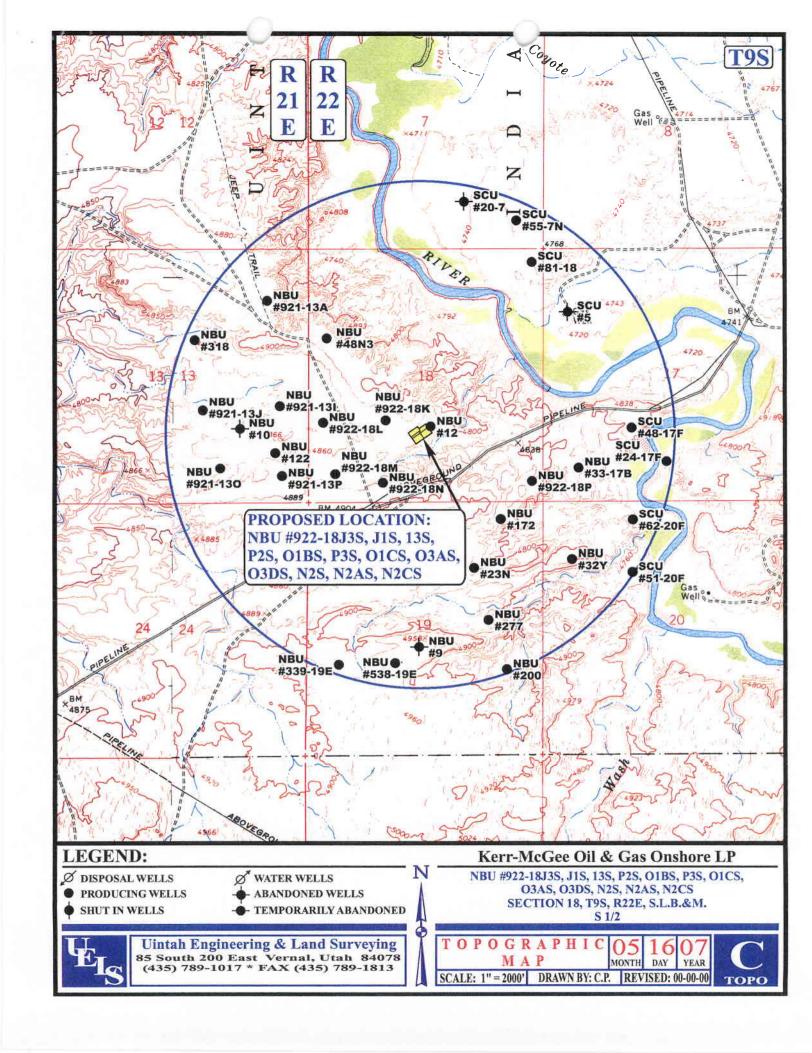
**LOCATION PHOTOS** 

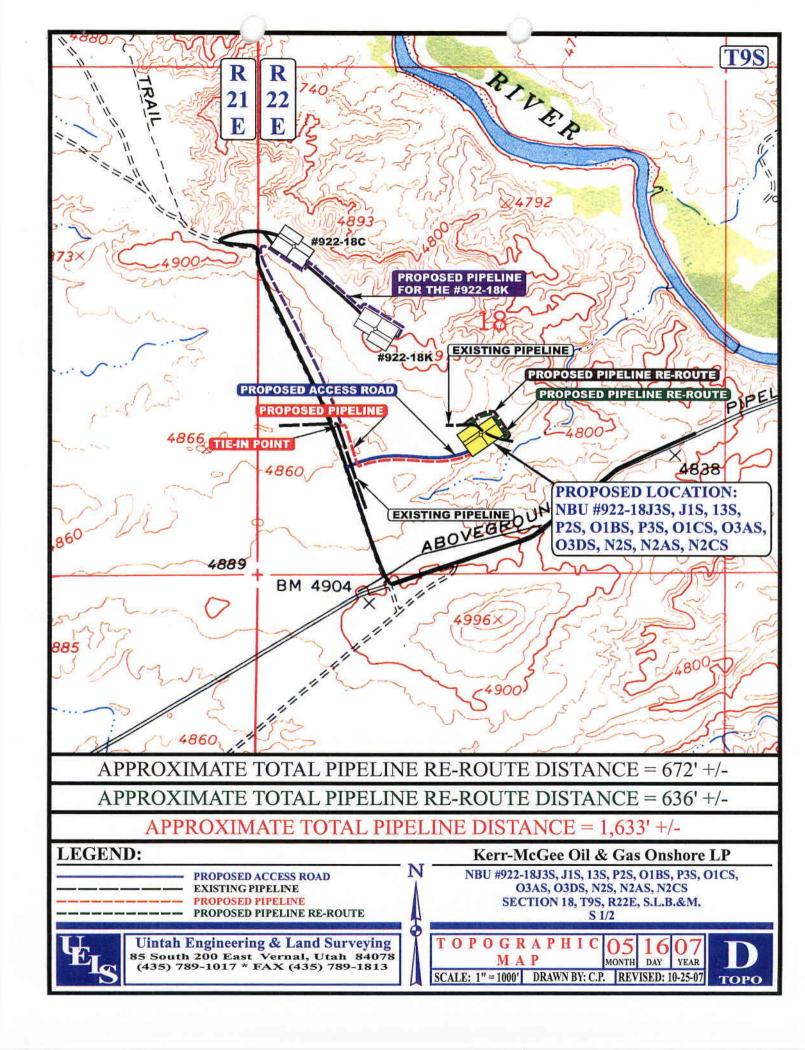
РНОТО

TAKEN BY: L.K. DRAWN BY: C.P. REVISED: 00-00-00









Kerr-McGee Oil & Gas Onshore LP
NBU #922-18J3S, J1S, I3S, P2S, O1BS, P3S, O1CS, O3AS, O3DS, N2S, N2AS, N2CS
PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH SECTION 18, T9S, R22E, S.L.B.&M.



PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: EASTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

**CAMERA ANGLE: EASTERLY** 



Uintah Engineering & Land Surveying S South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

PIPELINE PHOTOS

**РНОТО** 

TAKEN BY: L.K. | DRAWN BY: C.P. | REVISED: 00-00-00

# Toologic Company of the Company of t

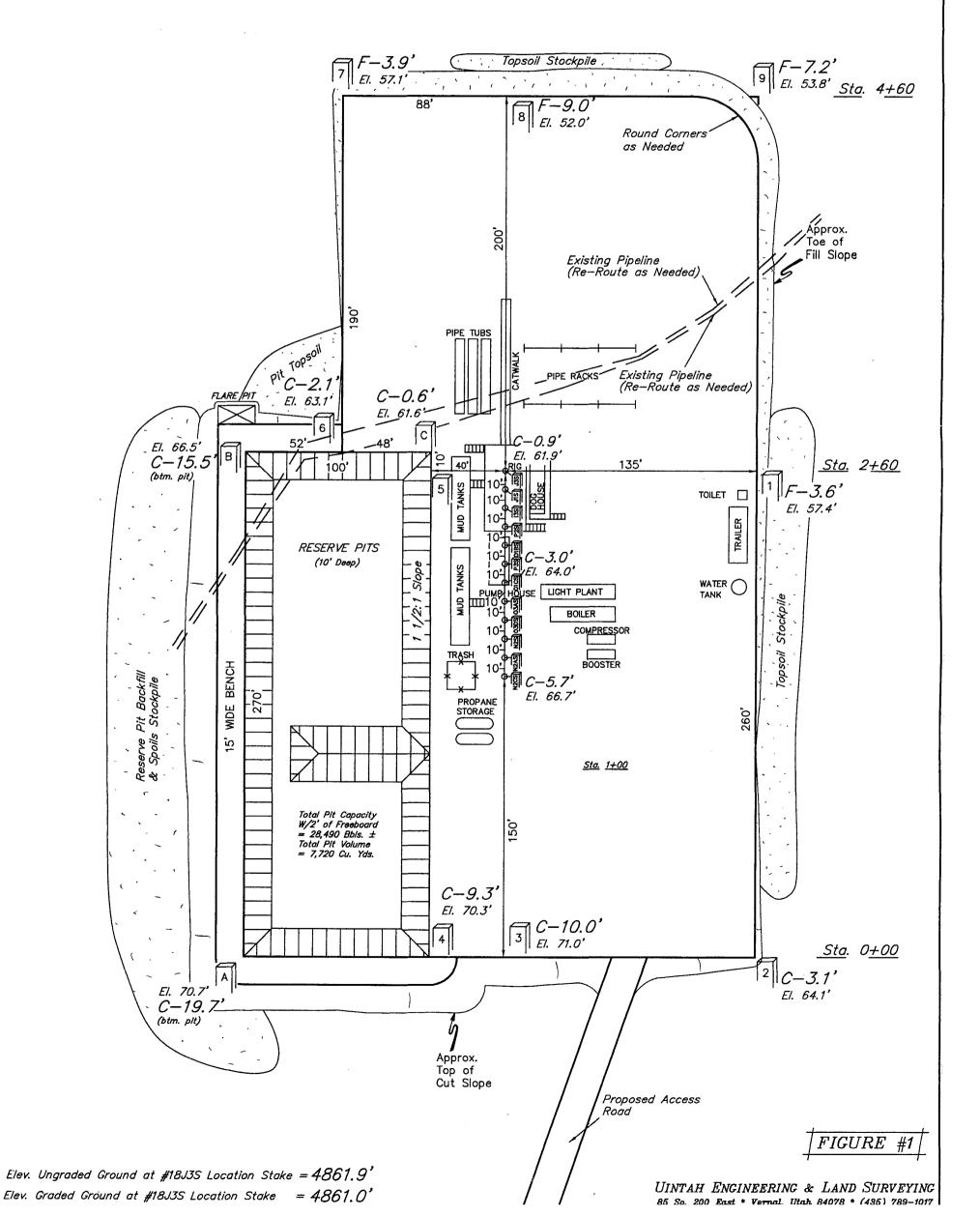
SCALE: 1" = 50' DATE: 05-16-07 Drawn By: C.H. REV: 08-09-07

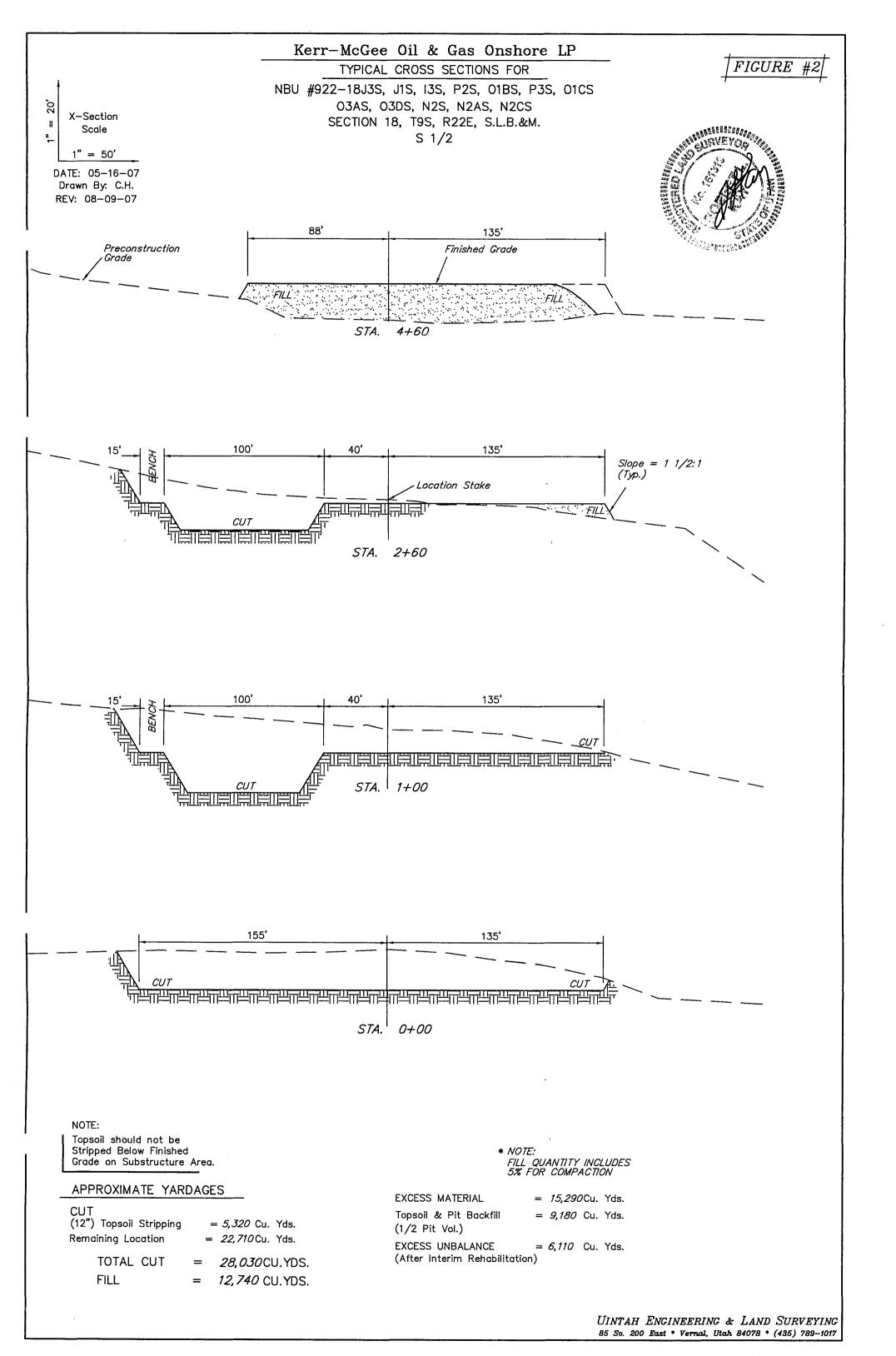
# Kerr-McGee Oil & Gas Onshore LP

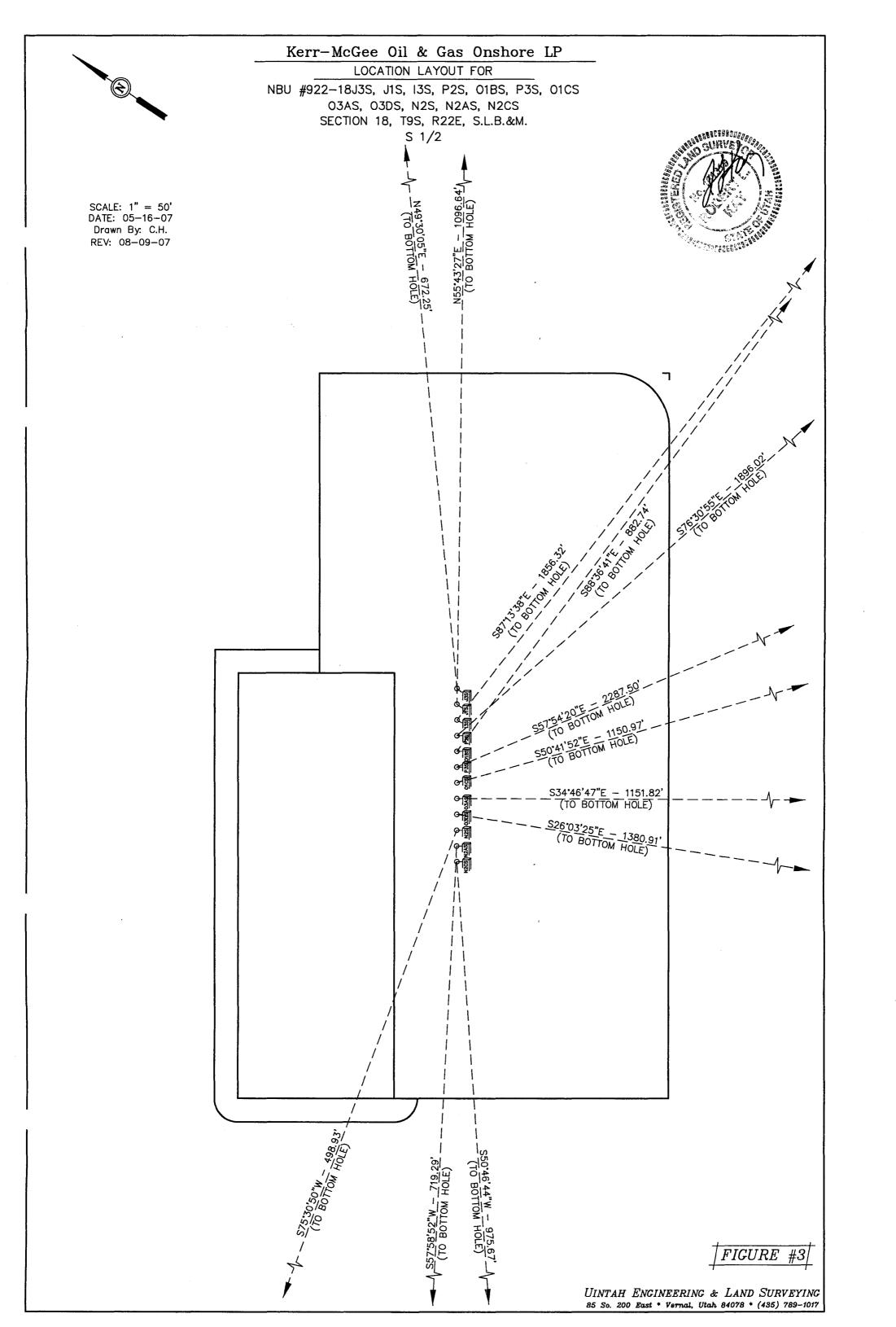
# LOCATION LAYOUT FOR

NBU #922-18J3S, J1S, I3S, P2S, O1BS, P3S, O1CS O3AS, O3DS, N2S, N2AS, N2CS SECTION 18, T9S, R22E, S.L.B.&M. S 1/2





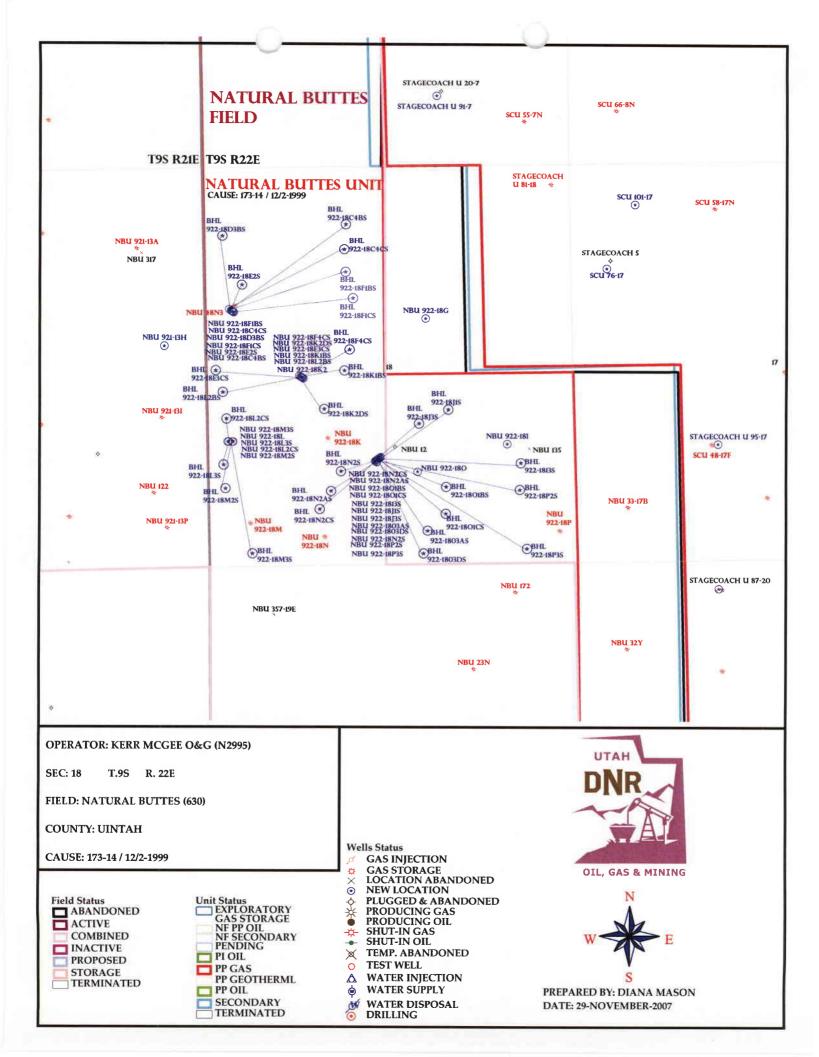




# WORKSHEET

# APPLICATION FOR PERMIT TO DRILL

| APD RECEIVED: 11/20/2007                                    | API NO. ASSIGNED: 43-047-39844                    |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| WELL NAME: NBU 922-1813S                                    |   |  |  |  |  |  |  |
| OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )                    | PHONE NUMBER: 435-781-7024                        |  |  |  |  |  |  |
| CONTACT: SHEILA UPCHEGO                                     |   |  |  |  |  |  |  |
| PROPOSED LOCATION:  | INSPECT LOCATN BY: / /                            |  |  |  |  |  |  |
| NWSE 18 090S 220E<br>SURFACE: 1442 FSL 2580 FEL             | Tech Review Initials Date                         |  |  |  |  |  |  |
| BOTTOM: 1346 FSL 0726 FEL                                   | Engineering                                       |  |  |  |  |  |  |
| COUNTY: UINTAH LATITUDE: 40.03271 LONGITUDE: -109.4818      | Geology   |  |  |  |  |  |  |
| UTM SURF EASTINGS: 629537 NORTHINGS: 44322                  | Surface   |  |  |  |  |  |  |
| RECEIVED AND/OR REVIEWED:                                   | LOCATION AND SITING:                              |  |  |  |  |  |  |
| RECEIVED AND/OR REVIEWED:                                   | LOCATION AND SITING: R649-2-3.                    |  |  |  |  |  |  |
| Bond: Fed[1] Ind[] Sta[] Fee[] (No. RLB0005239 )            | Unit:NATURAL BUTTES                               |  |  |  |  |  |  |
| N Potash (Y/N)  | R649-3-2. General                                 |  |  |  |  |  |  |
| <u>N<sup>i</sup></u> Oil Shale 190-5 (B) or 190-3 or 190-13 | Siting: 460 From Qtr/Qtr & 920' Between Well      |  |  |  |  |  |  |
| <u>✓</u> Water Permit (No. 43-8496 )                        | R649-3-3. Exception                               |  |  |  |  |  |  |
| (No. 43-8496 )  RDCC Review (Y/N)                           | Drilling Unit                                     |  |  |  |  |  |  |
| (Date: )  | Board Cause No: 193.14                            |  |  |  |  |  |  |
| MA Fee Surf Agreement (Y/N)                                 | Eff Date: 1221449 Siting: 40 fr uldix & Uncomm-re |  |  |  |  |  |  |
| Intent to Commingle (Y/N)                                   | ✓ R649-3-11. Directional Drill                    |  |  |  |  |  |  |
| COMMENTS: Soprate S   | ple   |  |  |  |  |  |  |
| STIPULATIONS: 1- Fodus Opport                               | nc()  |  |  |  |  |  |  |



# **United States Department of the Interior**

# **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

November 30, 2007

### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2007 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Natural Buttes Unit, Uintah County, Utah.

API# WELL NAME LOCATION

(Proposed PZ Wasatch/MesaVerde)

43-047-39821 NBU 922-18F4CS Sec 18 T09S R22E 2529 FSL 1248 FWL BHL Sec 18 T09S R22E 2406 FNL 1895 FWL

43-047-39822 NBU 922-18K2DS Sec 18 T09S R22E 2508 FSL 1282 FWL BHL Sec 18 T09S R22E 2099 FSL 1548 FWL

43-047-39823 NBU 922-18E3CS Sec 18 T09S R22E 2540 FSL 1231 FWL BHL Sec 18 T09S R22E 2632 FSL 0136 FWL

43-047-39824 NBU 922-18K1BS Sec 18 T09S R22E 2524 FSL 1256 FWL BHL Sec 18 T09S R22E 2602 FSL 1821 FWL

43-047-39825 NBU 922-18M3S Sec 18 T09S R22E 1688 FSL 0334 FWL BHL Sec 18 T09S R22E 0203 FSL 0571 FWL

43-047-39826 NBU 922-18L3S Sec 18 T09S R22E 1689 FSL 0274 FWL BHL Sec 18 T09S R22E 1390 FSL 0214 FWL

43-047-39827 NBU 922-18L2CS Sec 18 T09S R22E 1687 FSL 0344 FWL BHL Sec 18 T09S R22E 1994 FSL 0262 FWL

43-047-39828 NBU 922-18M2S Sec 18 T09S R22E 1689 FSL 0284 FWL BHL Sec 18 T09S R22E 1075 FSL 0232 FWL 43-047-39829 NBU 922-18P3S Sec 18 T09S R22E 1424 FSL 2605 FEL BHL Sec 18 T09S R22E 0203 FSL 0668 FEL 43-047-39830 NBU 922-18P2S Sec 18 T09S R22E 1436 FSL 2588 FEL BHL Sec 18 T09S R22E 0988 FSL 0745 FEL 43-047-39831 NBU 922-18N2S Sec 18 T09S R22E 1402 FSL 2637 FEL BHL Sec 18 T09S R22E 1278 FSL 1753 FWL 43-047-39832 NBU 922-1803DS Sec 18 T09S R22E 1407 FSL 2629 FEL BHL Sec 18 T09S R22E 0165 FSL 2024 FEL 43-047-39833 NBU 922-1803AS Sec 18 T09S R22E 1413 FSL 2621 FEL BHL Sec 18 T09S R22E 0465 FSL 1965 FEL 43-047-39834 NBU 922-1801CS Sec 18 T09S R22E 1419 FSL 2613 FEL BHL Sec 18 T09S R22E 0687 FSL 1723 FEL 43-047-39835 NBU 922-1801BS Sec 18 T09S R22E 1430 FSL 2596 FEL BHL Sec 18 T09S R22E 1046 FSL 1714 FEL 43-047-39836 NBU 922-18C4BS Sec 18 T09S R22E 1875 FNL 0362 FWL BHL Sec 18 T09S R22E 0745 FNL 1878 FWL 43-047-39837 NBU 922-18E2S Sec 18 T09S R22E 1870 FNL 0354 FWL BHL Sec 18 T09S R22E 1529 FNL 0503 FWL 43-047-39838 NBU 922-18F1CS Sec 18 T09S R22E 1892 FNL 0387 FWL BHL Sec 18 T09S R22E 1724 FNL 1956 FWL 43-047-39839 NBU 922-18N2AS Sec 18 T09S R22E 1396 FSL 2228 FWL BHL Sec 18 T09S R22E 1016 FSL 1617 FWL 43-047-39840 NBU 922-18L2BS Sec 18 T09S R22E 2513 FSL 1273 FWL BHL Sec 18 T09S R22E 2344 FSL 0223 FWL 43-047-39841 NBU 922-18D3BS Sec 18 T09S R22E 1853 FNL 0329 FWL BHL Sec 18 T09S R22E 0877 FNL 0256 FWL 43-047-39842 NBU 922-18J3S Sec 18 T09S R22E 1453 FSL 2564 FEL BHL Sec 18 T09S R22E 1888 FSL 2052 FEL

43-047-39843 NBU 922-18J1S Sec 18 T09S R22E 1447 FSL 2572 FEL

BHL Sec 18 T09S R22E 2062 FSL 1665 FEL

43-047-39844 NBU 922-18I3S Sec 18 T09S R022E 1442 FSL 2580 FEL BHL Sec 18 T09S R022E 1346 FSL 0726 FEL

43-047-39845 NBU 922-18C4CS Sec 18 T09S R22E 1881 FNL 0370 FWL BHL Sec 18 T09S R22E 1075 FNL 1849 FWL

43-047-39846 NBU 922-18F1BS Sec 18 T09S R22E 1886 FNL 0379 FWL BHL Sec 18 T09S R22E 1375 FNL 1868 FWL

43-047-39847 NBU 922-18N2CS Sec 18 T09S R22E 1390 FSL 2220 FWL BHL Sec 18 T09S R22E 0775 FSL 1462 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:11-30-07



# State Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA Division Director

December 3, 2007

Kerr McKee Oil and Gas Onshore LP 1368 South 1200 East Vernal, UT 84078

Re:

NBU 922-18I3S Well, Surface Location 1442' FSL, 2580' FEL, NW SE, Sec. 18,

T. 9 South, R. 22 East, Bottom Location 1346' FSL, 726' FEL, SE SE, Sec. 18,

T. 9 South, R. 22 East, Uintah County, Utah

### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39844.

Sincerely,

Gil Hunt

Associate Director

Til That

pab Enclosures

cc:

Uintah County Assessor

Bureau of Land Management, Vernal Office



| Operator:                      | Kerr McKee Oil and Gas Onshore LP |                          |                   |  |  |
|--------------------------------|-----------------------------------|--------------------------|-------------------|--|--|
| Well Name & Number             | NBU 92                            | 22-18I3S                 |                   |  |  |
| API Number:                    | 43-047-                           | 39844                    |                   |  |  |
| Lease:                         | UTU-0461                          |                          |                   |  |  |
| Surface Location: <u>NW SE</u> | Sec. 18                           | <b>T.</b> <u>9 South</u> | <b>R.</b> 22 East |  |  |
| Bottom Location: SE SE         | Sec. 18                           | T. 9 South               | <b>R.</b> 22 East |  |  |

### **Conditions of Approval**

### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### 2. Notification Requirements

Notify the Division with 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
- 6 In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

Form 3160-3 (August 1999)

2601 NOV 5 PM 12: 33

FORM APPROVED OMB No. 1004-0136

**UNITED STATES** DEPARTMENT OF THE INTERIOR

Expires November 30, 2000

| BUREAU OF LAND MAN   | NAGEMENT                 | BULFALIG                      | F LAHO MGHT.                | UTU-0461   |                    |
|--|--------------------------|-------------------------------|-----------------------------|--|--------------------|
| APPLICATION FOR PERMIT TO  | DRILL O                  |                               | emioridii.                  | 6. If Indian, Allottee or Trib<br>TRIBAL SURFACE | oe Name            |
| 1a. Type of Work: X DRILL RE   | ENTER                    |                               |                             | 7. If Unit or CA Agreement                       | t, Name and No.    |
|  |                          |                               |                             | UNIT #891008900A                                 | <del></del>        |
| b. Type of Well: Oil Well Gas Well Other   |                          | Single Zone                   | Multiple Zone               | 8. Lease Name and Well No<br>NBU 922-18I3S       | 0.                 |
| 2. Name of Operator KERR MCGEE OIL AND GAS ONSHORE LP  |                          |                               |                             | 9. API Well No.<br>43 047 39                     | 844                |
| 3A. Address<br>1368 SOUTH 1200 EAST VERNAL, UT 84078   | 3b. Phone N<br>(435) 781 | o. (include area cod<br>-7024 | de)                         | 10. Field and Pool, or Explo                     |                    |
| 4. Location of Well (Report location clearly and in accordance with At surface NW/SE 1442'FSL, 2580'FEL                        | any State req            | uirements.*)                  |                             | 11. Sec., T., R., M., or Blk,                    | and Survey or Area |
| At proposed prod. Zone SE/SE 1346'FSL, 726'FEL   |                          |                               |                             | SEC. 18, T9S, R22E                               |                    |
| <ol> <li>Distance in miles and direction from nearest town or post office*</li> <li>16.6 +/- MILES FROM OURAY, UTAH</li> </ol> |                          |                               |                             | 12. County or Parish UINTAH                      | 13. State<br>UTAH  |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)          | 16. No. of A             | Acres in lease                | 17. Spacing Unit dec        | licated to this well                             |                    |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  REFER TO TOPO C    | 10 D                     | d Depth                       | 20. BLM/BIA Bond RLB0005239 | No. on file                                      |                    |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4861'GL  |                          | mate date work wil            | l start*                    | 23. Estimated duration TO BE DETERMINE!          | <u>)</u>           |
|  | 24. A                    | Attachments                   |                             |  |                    |
| The following, completed in accordance with the requirements of Ons  | hore Oil and (           | Gas Order No. 1, sh           | all be attached to this     | form:  |                    |
| 1. Well plat certified by a registered surveyor.   |                          | 4. Bond to cov                | ver the operations unl      | ess covered by an existing bor                   | nd on file (see    |
| 2. A Drilling Plan.  |                          | Item 20 abo                   | eve).                       |  |                    |

- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be required by the authorized office.

| 25. Signature MM MMM   | Name (Printed/Typed) SHEILA UPCHEGO  | Date 11/16/2007                      |
|--|--|--------------------------------------|
| Title  |  |                                      |
| SENIOR LAND ADMIN SPECIALIST   |  |                                      |
| Approved by (Signature)  | Name (Printed/Typed)   | Date 2 2 2008                        |
| Most Ball  | MATT BAKER   | 1FEB 2 2 2000                        |
| Title Assistant Field Menager 1  | Office   |                                      |
| ACTIVE I TOUR & Mineral Resources                                      | vernal field office  | l                                    |
| Application approval does not warrant or certify that the applicant ho | olds legal or equitable title to those rights in the subject lease which wou | ald entitle the applicant to conduct |

operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

NOTICE OF APPROVAL

## CONDITIONS OF APPROVAL ATTACHEE

RECEIVED

FEB 2 6 2008

DIM OF GIL, GAS & MINING

No 1005 08 MIC 0080 A



### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE**

**VERNAL. UT 84078** 

(435) 781-4400



### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Kerr-McGee Oil & Gas Onshore, LP Location:

NWSE, Sec. 18, T9S, R22E

Well No: **NBU 922-1813S**  Lease No:

UTU-0461

API No: 43-047-39844

Agreement: Natural Buttes Unit

| Title                             | Name            | Office Phone Number | Cell Phone Number |
|-----------------------------------|-----------------|---------------------|-------------------|
| Petroleum Engineer:               | Matt Baker      | (435) 781-4490      | (435) 828-4470    |
| Petroleum Engineer:               | Michael Lee     | (435) 781-4432      | (435) 828-7875    |
| Petroleum Engineer:               | James Ashley    | (435) 781-4470      | (435) 828-7874    |
| Petroleum Engineer:               | Ryan Angus      | (435) 781-4430      | (435) 828-7368    |
| Supervisory Petroleum Technician: | Jamie Sparger   | (435) 781-4502      | (435) 828-3913    |
| NRS/Enviro Scientist:             | Karl Wright     | (435) 781-4484      | (435) 828-7381    |
| NRS/Enviro Scientist:             | Holly Villa     | (435) 781-4404      |                   |
| NRS/Enviro Scientist:             | •               | (435) 781-4476      |                   |
| NRS/Enviro Scientist:             | Chuck Macdonald | (435) 781-4441      | (435) 828-7481    |
| NRS/Enviro Scientist:             | Michael Cutler  | (435) 781-3401      | (435) 828-3546    |
| NRS/Enviro Scientist:             | Anna Figueroa   | (435) 781-3407      | (435) 828-3548    |
| NRS/Enviro Scientist:             | Verlyn Pindell  | (435) 781-3402      | (435) 828-3547    |
| NRS/Enviro Scientist:             | Darren Williams | (435) 781-4447      |                   |
| NRS/Enviro Scientist:             | Nathan Packer   | (435) 781-3405      | (435) 828-3545    |
|                                   |                 | Fax: (435) 781-3420 |                   |

### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

### **NOTIFICATION REQUIREMENTS**

| Construction Activity   | The Ute Tribe Energy & Minerals Dept. shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday. |
|---|---|
| Construction Completion                                       | Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion.          |
| Spud Notice<br>(Notify Petroleum Engineer)                    | Twenty-Four (24) hours prior to spudding the well.  |
| Casing String & Cementing (Notify Supv. Petroleum Tech.)      | Twenty-Four (24) hours prior to running casing and cementing all casing strings.  |
| BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)- | Twenty-Four (24) hours prior to initiating pressure tests.  |
| First Production Notice<br>(Notify Petroleum Engineer)        | Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.                                |

Page 2 of 7 Well Name: NBU 922-18I3S

2/19/2008

## SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### **General Surface COAs**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer AO. A report will be prepared by a BLM permitted paleontologist and submitted to the AO at the completion of surface disturbing activities.

### **Specific Surface COAs**

- Re-route 24 Inch pipeline on location.
- 8 Inch pipeline.
- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROWs.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you
  to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax
  Ordinance.
- Any deviation of submitted APDs and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.

Page 3 of 7 Well Name: NBU 922-18I3S 2/19/2008

 All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APDs and/or ROW permits/authorizations on their person(s) during all phases of construction.

- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel should refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department should be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

Page 4 of 7 Well Name: NBU 922-18I3S

2/19/2008

### DOWNHOLE CONDITIONS OF APPROVAL

### SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL

- A surface casing shoe integrity test shall be performed.
- Production casing cement top shall be at a minimum of 200' above the surface casing shoe.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment BOPE shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded
  in the daily drilling report. Components shall be operated and tested as required by
  Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE
  pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the
  rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources such as
  Gilsonite, tar sands, oil shale, trona, etc. to the Vernal Field Office, in writing, within 5
  working days of each encounter. Each report shall include the well name/number, well
  location, date and depth from KB or GL of encounter, vertical footage of the encounter

Page 5 of 7 Well Name: NBU 922-1813S 2/19/2008

and, the name of the person making the report along with a telephone number should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field
  Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers
  until the well is completed.
- A cement bond log CBL will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well Name: NBU 922-18I3S 2/19/2008

### **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" Oil and Gas Operations Report OGOR starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 303 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - o Operator name, address, and telephone number.
  - o Well name and number.
  - o Well location ¼¼, Sec., Twn, Rng, and P.M..
  - Date well was placed in a producing status date of first production for which royalty will be paid.
  - The nature of the well's production, i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons.
  - The Federal or Indian lease prefix and number on which the well is located;
     otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees NTL 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events fires, accidents, blowouts, spills, discharges as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" BLM Form 3160-4 shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples cuttings, fluid, and/or gas shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall

Page 7 of 7 Well Name: NBU 922-18I3S 2/19/2008

have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter
  calibration and all future meter proving schedules. A copy of the meter calibration reports
  shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to
  the API standards for liquid hydrocarbons and the AGA standards for natural gas
  measurement. All measurement points shall be identified as the point of sale or allocation
  for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or
  workover equipment shall be removed from a well to be placed in a suspended status
  without prior approval of the BLM Vernal Field Office. If operations are to be suspended for
  more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and
  notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" Form BLM 3160-5 must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

### Form 3160-5 st, 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED

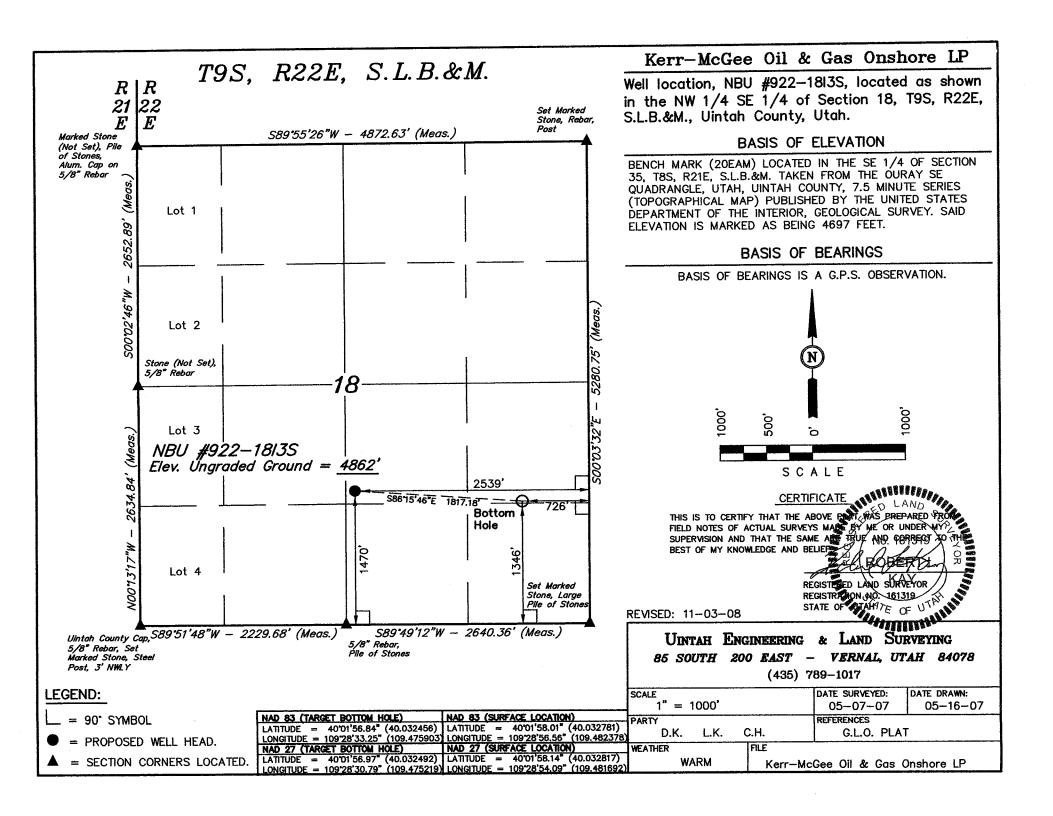
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| Zvnirec. | 71   | 21  | 2016  |

| SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals. |  |                       | UTU-0461 6. If Indian, Allottee, or Tribe Name Ute Tribe |                  |                         |  |
|--|--|-----------------------|--|------------------|-------------------------|--|
| SUBMIT   | IN TRIPLICATE - Other Insti                                  | ructions on rev       | erse side.   |                  | . Agreement Name and    | i/or No.                               |
| 1. Type of Well  | ГТал   |                       |  | 8. Well Name a   | UTU-63047A              |  |
| 2. Name of Operator  | Other  |                       |  | NBU              |                         | 2-1813S                                |
| Kerr-McGee Oil & Gas Ons   | shore. LP  |                       |  | 9. API Well No   |                         | -10100                                 |
| 3a. Address  |  | b. Phone No. (include | de area code)  | L                | 43-047-39844            |  |
| P.O. Box 173779, Der   |  | 720.92                | 9.6226   | 10. Field and Po | ool, or Exploratory Are | a                                      |
| 4. Location of Well (Footage, Sec., T.   |  |                       |  | 11 C             | Natural Buttes          | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| NW SE Sec. 18  | T 9S R 22E   |                       |  | 11. County or P  | arish, State<br>Uintah  |  |
| 1470 FSL 2539  | FEL PRIATE BOX(S) TO INDICATE                                | NATURE OF N           | VOTICE REPOR   | T OR OTHE        |                         |  |
|  | RIATE BOX(5) TO INDICATE                                     |                       |  | CI, OK OTHE      | KDAIA                   |  |
| TYPE OF SUBMISSION   |  | 171                   | PE OF ACTION   |                  |                         |  |
| Notice of Intent   | Acidize  | eepen                 | Production ( S   | Start/Resume)    | Water Shut-of           | f                                      |
|  | Altering Casing F  | racture Treat         | Reclamation  |                  | Well Integrity          |  |
| X Subsequent Report  | Casing Repair  | lew Construction      | Recomplete   |                  | X Other                 |  |
| A Subsequent Report  |  |                       |  |                  | Surface Lo              |  |
| p  | Change Plans P   | lug and abandon       | Temporarily /  | Abandon          | Surface Lo              | Sation                                 |
| Final Abandonment Notice   | Convert to Injection P                                       | lug back              | Water Dispos   | al               |                         |  |
|  | Gas Onshore, LP, res<br>ave been moved to NV<br>een changed. | VSE 1470'             | FSL & 2539   | ) FEL. Th        |                         |  |
| 629549   | x 40.03278   | 7                     | <b>ederal Approval</b><br>Action is Necesi               | of the           | 60m/ onle               |  |
| 4 43 229   | 04   |                       | ders! Appros!  | 3817             | COPY SENT T             | O OPERATO                              |
| , ,  | 109.48   | 1661                  | Action is  |                  | Date: 12.3              | 02008                                  |
|  |  |                       |  |                  | Initials:               | KS                                     |
|  |  |                       |  |                  | ti filialo.             |  |
| 14. I hereby certify that the foregoing i  |  |                       |  |                  |                         |  |
| Name (Printed/ Typed)  | s true and correct.  |                       |  |                  |                         |  |
| Kevin McIntyre   |  | Title                 |  | Regulatory A     | nalyst                  |  |
| Signature K  | : O  | Date                  |  | 11/12/0          | 8                       |  |
| V ~ ~  | THIS SPACE FOR FE  | DERAL OR ST           | TATE OFFICE  |                  |                         |  |
| Approved by Conditions of approval, if any are attached certify that the applicant holds legal or extensions.  | Approval of this notice does not warran                      | IT OF TABLE           | EY G. HILL   | <del> </del>     | ate 12-22               | -08                                    |
| which would entitle the applicant to con   |  |                       | WANAGE   |                  |                         |  |

Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitiousor fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

RECEIVED
NOV 17 2008



### STATE OF UTAH

|  | DEPARTMENT OF NATURAL RESOURCE  | CES  |  |
|--|---|--|--|
|  | DIVISION OF OIL, GAS AND MIN  | ING  | 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461     |
| SUNDRY   | NOTICES AND REPORTS   | ON WELLS   | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  Ute Tribe     |
| Do not use this form for proposals to drill n<br>drill horizontal la | new wells, significantly deepen existing wells below current<br>sterals. Use APPLICATION FOR PERMIT TO DRILL form | nt bottom-hole depth, reenter plugged wells, or to<br>n for such proposals.  | 7. UNIT OF CA AGREEMENT NAME: 891008900A             |
| 1. TYPE OF WELL OIL WELL   | GAS WELL OTHER  |  | 8. WELL NAME and NUMBER:<br>NBU 922-18I3S            |
| 2. NAME OF OPERATOR:   |   |  | 9. API NUMBER:                                       |
| Kerr-McGee Oil & Gas On  | shore, LP   |  | 4304739844   |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779                              | Y Denver STATE CO ZIP 8   | PHONE NUMBER: 0217-3779 (720) 929-6226   | 10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1470'                       | FSI & 2539' FFI   |  | соинту: <b>Uintah</b>                                |
|  |   | ·<br>  |  |
| QTR/QTR, SECTION, TOWNSHIP, RAN                                      | IGE, MERIDIAN: NWSE 18 9S 22  | <b>E</b>   | STATE: UTAH  |
| 11. CHECK APPR   | ROPRIATE BOXES TO INDICATE  | NATURE OF NOTICE, REPO   | RT, OR OTHER DATA                                    |
| TYPE OF SUBMISSION   |   | TYPE OF ACTION   |  |
| NOTICE OF INTENT   | ACIDIZE [   | DEEPEN   | REPERFORATE CURRENT FORMATION                        |
| (Submit in Duplicate)  | ALTER CASING  | FRACTURE TREAT   | SIDETRACK TO REPAIR WELL                             |
| Approximate date work will start:                                    | CASING REPAIR   | NEW CONSTRUCTION   | TEMPORARILY ABANDON                                  |
|  | CHANGE TO PREVIOUS PLANS  | OPERATOR CHANGE  | TUBING REPAIR  |
|  | CHANGE TUBING   | PLUG AND ABANDON   | VENT OR FLARE  |
| SUBSEQUENT REPORT  | CHANGE WELL NAME  | PLUG BACK  | WATER DISPOSAL                                       |
| (Submit Original Form Only)  | CHANGE WELL STATUS  | PRODUCTION (START/RESUME)  | WATER SHUT-OFF                                       |
| Date of work completion:   | COMMINGLE PRODUCING FORMATIONS  | RECLAMATION OF WELL SITE   | <b>—</b>   |
|  | CONVERT WELL TYPE   | RECOMPLETE - DIFFERENT FORMATION   | ✓ OTHER: APD Extension                               |
| 42 PECCHIPE PROPOSED OF CO   |   |  |  |
| 12. DESCRIBE PROPOSED OR CO  | DMPLETED OPERATIONS. Clearly show all per   | rtinent details including dates, depths, volum   | es, etc.   |
| K M - O O   0 - O - O  | 1. 15   |  |  |
|  | nshore, LP, respectfully requests a<br>ision of Oil, Gas, and Mining initiall                                     |  |  |
| operations. The Otah Divi  | ision of Oil, Gas, and Minning milian   | y approved this APD on 12/03/2   | 2007.  |
|  |   |  |  |
|  | Approved t  | ov the   |  |
|  | Utah Divisi   | ion of   |  |
|  | Oil, Gas and  | Mining   |  |
|  | Oii, Gide and   | •  |  |
|  | . 0   |  |  |
|  | Date: 12-2  | 2-00   |  |
|  | $\mathcal{L}_{m}(I)$  | $(U(\mathcal{U}/\Lambda))$   |  |
|  | By:   | The state of the s |  |
|  |   |  |  |
|  |   | 10   |  |
|  |   |  |  |
| NAME (PLEASE PRINT) Kevin McI  | ntyre   | TITLE Regulatory Analy   | /SI  |
| SIGNATURE  | me  | DATE 12/9/2008   |  |
| (This space for State use only)                                      |   |  |  |
| AABUARI  | UT TO ODEDATOR  | <b>₹ </b>  |  |
| COPT SEI   | NT TO OPERATOR  | H  | RECEIVED   |

(5/2000)

Initials:

(See Instructions on Reverse Side)

DEC 1 1 2008

### Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

| Well Name:<br>Location:<br>Company Per |                                       | & 2539' FEL, Sec. 18, T9S R22<br>Kerr-McGee Oil & Gas Onsh<br>12/3/2007              |                                       |
|--|---------------------------------------|--|---------------------------------------|
| above, hereby                          | verifies that the                     | n legal rights to drill on th<br>information as submitted<br>mains valid and does no | l in the previously                   |
| Following is a verified.               | checklist of some                     | e items related to the app   | olication, which should be            |
| •                                      | rivate land, has t<br>en updated? Yes | he ownership changed, i<br>□ No ☑  | f so, has the surface                 |
|  |                                       | the vicinity of the proposents for this location? Yes                                | ed well which would affect<br>i⊡ No ☑ |
|  |                                       | er agreements put in plac<br>proposed well? Yes⊟No                                   |                                       |
|  | •                                     | to the access route inclu<br>proposed location? Yes[                                 | ding ownership, or right-<br>⊒No ☑    |
| Has the appro                          | ved source of wa                      | ater for drilling changed?   | Yes□ No 🗹                             |
|  | iire a change in p                    | changes to the surface lo<br>plans from what was disc                                |                                       |
| Is bonding still                       | in place, which o                     | covers this proposed wel   | l? Yes ☑No □                          |
| K- 1                                   | n_                                    |  | 12/9/2008                             |
| Signature                              |                                       |  | Date                                  |
| Title: Regulator                       | ry Analyst                            |  |                                       |
| Representing:                          | Kerr-McGee Oil &                      | & Gas Onshore, LP  | RECEIVED                              |

DEC 1 1 2008

DIV. OF OIL, GAS & MINING



December 15, 2008

Mrs. Diana Mason Divison of Oil, Gas, and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

RE: Directional Drilling R649-3-11
NBU 922-18I3S
T9S R22E
Section 18: SESE
NWSE 1470' FSL & 2539' FEL (surface)
SESE 1346' FSL & 726' FEL (bottom hole)
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-1813S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore, LP, requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Li ne

Kevin McIntyre

Regulatory Analyst

## DIVISION OF OIL, GAS AND MINING

### **SPUDDING INFORMATION**

| Name of Cor  | mpany: Kl | ERR-McGEE O | IL & G.     | AS ONSHO     | )RE, L. | P                                     |               |
|--------------|-----------|-------------|-------------|--------------|---------|---------------------------------------|---------------|
| Well Name    | •         | NBU 922-1   | 8I3S        | ~            |         | ····,                                 |               |
| Api No:      | 43-047-39 | 844         | L           | ease Type:   | FEDI    | ERAL                                  | ··            |
| Section 18   | Township_ | 09S Range   | 22E         | County       | UINT    | AH                                    |               |
| Drilling Cor | ntractor  | PETE MAR    | TIN DR      | L <b>G</b> R | .IG #   | BUCKET                                |               |
| SPUDDE       | D:        |             |             |              |         |                                       |               |
|              | Date      | 12/16/2008  | <del></del> |              |         |                                       |               |
|              | Time      | 8:00 AM     |             |              |         |                                       |               |
|              | How       | DRY         |             | •            |         |                                       |               |
| Drilling wi  | II Commen | oce:        |             |              |         |                                       |               |
| Reported by  |           | LEW W       | ELDON       | Ţ            |         | · · · · · · · · · · · · · · · · · · · |               |
| Telephone #_ |           | (435) 82    | 28-7035     |              | ····    |                                       | <del></del> . |
| Date         | 12/16/08  | Signed      | CHD         |              |         |                                       |               |

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL. GAS AND MINING

|   |  | NO.                                  | /ISION OF OIL, GAS A                   | ND MINI    | NG       |          |   |                                  |
|---|--|--------------------------------------|--|------------|----------|----------|---|----------------------------------|
| er versie ver |  |                                      | ENTITY ACTION                          | FORM       |          |          |   |                                  |
| Operator:   | Here the second contract of the second | McGEE OIL & GAS ON<br>OUTH 1200 EAST | ISHORE LP                              | Ope        | rator Ac | count Nu | ımber: <u>1</u>                         | 2995                             |
| Address:  | city VEI                               |                                      |  |            |          |          |   |                                  |
|   | state U                                | T                                    | zip 84078                              |            | P        | hone Nu  | mber: _(                                | (435) 781-7024                   |
| Well 1  | ****                                   |                                      |  |            |          | 1        | I I                                     |                                  |
| API Nut   |  |                                      | Name                                   | QQ         | Sec      | Twp      | Rng                                     | County                           |
| 430473  |  | NBU 922-1813S                        |  | NWSE       | 18       | 9S,      | 22E                                     | UINTAH                           |
| Action  | Code                                   | Current Entity<br>Number             | New Entity<br>Number                   | Spud Date  |          | te       |   | ity Assignment<br>iffective Date |
| B   |  | 99999                                | 3900                                   | 12/16/2008 |          | )8       | 121                                     | 30/08                            |
| Comment   | MIKU                                   | PETE MARTIN BUCK<br>WELL LOCATION ON | ET RIG. WSMI<br>N 12/16/2008 AT 0800 P | IRS B      | HL=      | : 5E     | EE                                      |                                  |
| Well 2  |  |                                      |  |            |          |          | , |                                  |
| API Nui   | nber                                   | Well                                 | Name                                   | QQ         | Sec      | Twp      | Rng                                     | County                           |

| API Number  | Well Name                                  |  | QQ        | Sec | Twp                                 | Rng | County |
|-------------|--|--|-----------|-----|-------------------------------------|-----|--------|
| Action Code | Current Entity New Entity<br>Number Number |  | Spud Date |     | Entity Assignment<br>Effective Date |     |        |
| Comments:   |  |  |           |     |                                     |     |        |

#### Well 3

| API Number  | Well I                   | QQ   | QQ Sec Twp |  |                                     | Rng County |  |  |
|-------------|--------------------------|--|------------|--|-------------------------------------|------------|--|--|
| Action Code | Current Entity<br>Number | Spud Date  |            |  | Entity Assignment<br>Effective Date |            |  |  |
| Comments:   |                          | enementation en enement a south en en en effecte a selection en electronic |            |  |                                     |            | And the second s |  |

### ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- Re-assign well from one existing entity to another existing entity
- Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

RECEIVED
DEC 1 8 2008

| SHEIL | Δ | 1 11 | 201 | 4 | EGC | 1 |
|-------|---|------|-----|---|-----|---|
|       |   |      |     | 1 |     | , |

Signature

PECULATORY ANALYST

REGULATORY ANALYST

12/17/2008

Date

(6/2000)

Form 3160-5 (August 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

5. Lease Serial No. UTU-0461

| Do not use this t   | IOTICES AND REPO<br>form for proposals t<br>Use Form 3160-3 (A                  | r an                                   | 6. If Indian, Allottee or Tribe Name TRIBAL SURFACE |                                   |                                       |  |
|---|---|--|---|-----------------------------------|---------------------------------------|--|
|   | T IN TRIPLICATE - Other   |  |   | Jnit of CA/Agree                  | ment, Name and/or No.                 |  |
| 1. Type of Well   | 7 11 1111 210/112 01/10/  | monuonono on page 2.                   | UNI7  | UNIT #891008900A                  |                                       |  |
| Oil Well Gas W  | Vell Other  |  |   | ll Name and No.<br>922-18I3S      |                                       |  |
| 2. Name of Operator<br>KERR McGEE OIL & GAS ONSHO   | RE LP   |  | 9. AP<br>4304                                       | I Well No.<br>739844              |                                       |  |
| 3a. Address<br>1368 SOUTH 1200 EAST VERNAL, UTAH 840  |   | 3b. Phone No. (include ar 435.781.7024 | NAT   | eld and Pool or E<br>JRAL BUTTES  | • •                                   |  |
| 4. Location of Well (Footage, Sec., T., SURFACE HOLE: NW/SE SEC. 18, T9S, R22E BOTTOM HOLE: SE/SE SEC. 18, T9S, R22E        | R.M., or Survey Description<br>E 1442 FSL, 2580 FEL   69 7<br>1346 FSL, 726 FEL | OFSL 2539 FE                           | 11. C   | ountry or Parish,<br>AH COUNTY, U |                                       |  |
| 12. CHEC  | CK THE APPROPRIATE BO   | X(ES) TO INDICATE NA                   | TURE OF NOTICE, RE                                  | PORT OR OTHE                      | ER DATA                               |  |
| TYPE OF SUBMISSION  |   |  | TYPE OF ACTION                                      |                                   |                                       |  |
| Notice of Intent  | Acidize Alter Casing  | Deepen Fracture Treat                  | Reclamation   | Start/Resume)                     | Water Shut-Off Well Integrity         |  |
| Subsequent Report   | Casing Repair Change Plans  | New Construction Plug and Abandon      | = .   | Abandon                           | Other WELL SPUD                       |  |
| Final Abandonment Notice  | Convert to Injection  | Plug Back                              | Water Dispo   | sal                               |                                       |  |
| determined that the site is ready for MIRU PETE MARTIN BUCKET RIG PIPE. CMT W/28 SX READY MIX.  SPUD WELL LOCATION ON 12/16 | . DRILLED 20" CONDUC  | TOR HOLE TO 40'. RAN                   | N 14" 36.7# SCHEDUL                                 | E 10                              |                                       |  |
|   |   |  |   |                                   | RECEIVED                              |  |
|   |   |  |   |                                   | DEC 2 2 2008                          |  |
|   |   |  |   | DIV. (                            | OF OIL, GAS & MINING                  |  |
| 14. I hereby certify that the foregoing is to Name (Printed/Typed) SHEILA UPCHEGO   | rue and correct.  | Title RE                               | GULATORY ANALYS                                     |                                   | · · · · · · · · · · · · · · · · · · · |  |
| Signature Mulh  | Mally   | Date 12/                               | 17/2008   |                                   |                                       |  |
|   | THIS SPACE  | FOR FEDERAL OR                         | STATE OFFICE  | USE                               |                                       |  |
| Approved by   |   |  | • .   |                                   |                                       |  |

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Title

Office

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010 5. Lease Serial No.

|  |  |  | UTU-0461  |                         |
|--|--|--|---|-------------------------|
|  | IOTICES AND REPORTS ON V<br>form for proposals to drill or to  |  | 6. If Indian, Allottee  | or Tribe Name           |
| abandoned well.  | Use Form 3160-3 (APD) for su   | ch proposals.  | TRIBAL SURFACE  |                         |
| SUBMIT   | T IN TRIPLICATE - Other instructions of  | n page 2.  | _   | eement, Name and/or No. |
| 1. Type of Well  |  |  | UNIT #891008900.  | A                       |
| Oil Well Gas W   | <del></del>  |  | 8. Well Name and No<br>NBU 922-1813S  | ).                      |
| 2. Name of Operator<br>KERR McGEE OIL & GAS ONSHOR   |  |  | 9. API Well No.<br>4304739844   |                         |
| 3a. Address<br>1368 SOUTH 1200 EAST VERNAL, UTAH 8407  | 78 3b. Phone No. 435.781.702   | . (include area code)<br>4   | 10. Field and Pool or<br>NATURAL BUTTE                                      |                         |
| 4. Location of Well (Footage, Sec., T., SURFACE HOLE: NW/SE SEC. 18, T9S, R22E BOTTOM HOLE: SE/SE SEC. 18, T9S, R22E       | R.,M., or Survey Description)<br>: 1442'FSL, 2580'FEL<br>1346'FSL, 726'FEL   |  | 11. Country or Parish<br>UINTAH COUNTY                                      |                         |
| 12. CHEC   | K THE APPROPRIATE BOX(ES) TO IND   | ICATE NATURE OF N  | OTICE, REPORT OR OTH  | HER DATA                |
| TYPE OF SUBMISSION   |  | TYPE OF  | ACTION  |                         |
| Notice of Intent   | Acidize Deep   |  | Production (Start/Resume)   | Water Shut-Off          |
| ✓ Subsequent Report  |  | =  | Reclamation Recomplete  | Well Integrity          |
| y Subsequent Report  | Change Plans Plug  | and Abandon  | Temporarily Abandon   | CSG                     |
| Final Abandonment Notice   | Convert to Injection Plug  |  | Water Disposal  |                         |
| CMT W/230 SX PREM CLASS G @<br>DISPLACE W/187 BBLS WATER. T<br>W/100 SX PREM CLASS G @15.8 F<br>NOTE: THE OPERATOR HAS CHA | 3/2009. DRILLED 12 1/4" SURFACE H<br>15.8 PPG 1.15 YIELD. TAILED CMT W<br>TOP OUT W/125 SX PREM CLASS G @<br>PPG 1.15 YIELD. CMT TO SURFACE H<br>ANGED THE SURFACE CSG DEPTH FI<br>'AN ANGUS, WITH THE BUREAU OF L | //200 SX PREM CLAS:<br>15.8 PPG 1.15 YIELD<br>IOLE STAYED FULL.<br>ROM THE ORIGINALL | S G @15.8 PPG 1.15 YI<br>D. DOWN BACKSIDE. 2N<br>WORT.<br>Y PERMITTED SURFA | ELD.<br>ND TOP OUT      |
| 14. I hereby certify that the foregoing is tr  | ue and correct.  |  |   |                         |
| Name (Printed/Typed) SHEILA UPCHEGO  |  | Title REGULATORY   | ANALYST   |                         |
| Signature Mull   | Miller   | Date 02/27/2009  |   |                         |
|  | THIS SPACE FOR FEDE  | RAL OR STATE   | OFFICE USE  |                         |
| Approved by  |  |  |   |                         |
|  |  | Title  |   | Date                    |
|  | <ul> <li>Approval of this notice does not warrant or c<br/>tle to those rights in the subject lease which we<br/>hereon.</li> </ul>  |  |   | DECEIVED                |

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

|   | STATE OF UTAH   |                                       | FORM 9  |  |  |  |  |
|---|---|---------------------------------------|---|--|--|--|--|
|   | DEPARTMENT OF NATURAL RESOURCE<br>DIVISION OF OIL, GAS, AND MIN |                                       | 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461 |  |  |  |  |
| SUND  | RY NOTICES AND REPORTS  | ON WELLS                              | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>UTE    |  |  |  |  |
| Do not use this form for proposition-hole depth, reenter plu<br>DRILL form for such proposals.  | 7.UNIT or CA AGREEMENT NAME:<br>NATURAL BUTTES                  |                                       |   |  |  |  |  |
| 1. TYPE OF WELL<br>Gas Well   | 8. WELL NAME and NUMBER:<br>NBU 922-18I3S                       |                                       |   |  |  |  |  |
| 2. NAME OF OPERATOR:<br>KERR-MCGEE OIL & GAS ONS  | HORE, L.P.  |                                       | 9. API NUMBER:<br>43047398440000                |  |  |  |  |
| <b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S  | treet, Suite 600, Denver, CO, 80217 3779                        | <b>PHONE NUMBER:</b> 720 929-6007 Ext | 9. FIELD and POOL or WILDCAT:<br>NATURAL BUTTES |  |  |  |  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1470 FSL 2539 FEL  |   |                                       | COUNTY:<br>UINTAH                               |  |  |  |  |
| QTR/QTR, SECTION, TOWNSHI<br>Qtr/Qtr: NWSE Section: 18  | IP, RANGE, MERIDIAN: Township: 09.0S Range: 22.0E Meridian:     | S                                     | STATE:<br>UTAH                                  |  |  |  |  |
| 11. CHE   | CK APPROPRIATE BOXES TO INDICAT                                 | E NATURE OF NOTICE, REPORT,           | OR OTHER DATA                                   |  |  |  |  |
| TYPE OF SUBMISSION  |   | TYPE OF ACTION                        |   |  |  |  |  |
|   | ACIDIZE   | ALTER CASING                          | CASING REPAIR                                   |  |  |  |  |
| ☐ NOTICE OF INTENT  | ☐ CHANGE TO PREVIOUS PLANS                                      | ☐ CHANGE TUBING                       | CHANGE WELL NAME                                |  |  |  |  |
| Approximate date work will start:   | ☐ CHANGE WELL STATUS  | ☐ COMMINGLE PRODUCING FORMATIONS      | CONVERT WELL TYPE                               |  |  |  |  |
| SUBSEQUENT REPORT Date of Work Completion:  | DEEPEN  | ☐ FRACTURE TREAT                      | ☐ NEW CONSTRUCTION                              |  |  |  |  |
| Date of Work Completion.  | OPERATOR CHANGE   | PLUG AND ABANDON                      | ☐ PLUG BACK                                     |  |  |  |  |
|   | PRODUCTION START OR RESUME                                      | RECLAMATION OF WELL SITE              | RECOMPLETE DIFFERENT FORMATION                  |  |  |  |  |
| SPUD REPORT Date of Spud:   | □ REPERFORATE CURRENT FORMATION □ SIDETRACK TO REPAIR WELL      |                                       | TEMPORARY ABANDON                               |  |  |  |  |
|   | TUBING REPAIR   | VENT OR FLARE                         | WATER DISPOSAL                                  |  |  |  |  |
| ✓ DRILLING REPORT   |   |                                       |   |  |  |  |  |
| Report Date:<br>6/23/2009   | │   | SI TA STATUS EXTENSION                | APD EXTENSION                                   |  |  |  |  |
| 0,23,2003   | ☐ WILDCAT WELL DETERMINATION                                    | OTHER                                 | OTHER:  |  |  |  |  |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. FINISHED DRILLING FROM 2470' TO 10,019' ON 06/21/2009. RAN 4 ½"  11.6# I-80 PRODUCTION CSG. TEST PUMPS & LINES TO 5000 PSI / PUMP 4Accepted by the BBLS H2O +615 SX LEAD CEMENT @ 11.8ppg (PREM LITE II I + .25 pps Utah Division of CELLOFLAKE ,5 pps KOL + 8% GEL + .5%SMS EXTENDER + 13.67 gal/sxQil, Gas and Mining 2.42 yield) + 1320 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ + 10% SAFTOR RECORD ONLY 2% GEL + .2% R3 = 5.90 gal/sx, 1.31 yield) / DROP PLUG & DISPLACE W/ 155.4. BBLS H2O + ADDITIVES / DID NOT BUMP PLUG / LIFT PRESSURE @ 2630 PSI ,FLOATS HELD,W/ 1.75 BBLS BACK TO INVENTORY LOST RETURNS @ 125 BBLS IN DISP W/25 BBLS LEAD CMT TO PIT (CALC TOP OF TAIL @ 3660,R.D.M.O. CMT EQUIP. 01:30-02:30- L/D LANDING JT,SET PACK OFF & TEST TO 5000# FOR 15 MIN 02:30-03:30-NIPPLE DOWN & RAISE BOP STACK,,PREP TO SKID, TO NBU 922-18JIS. RELEASED H&P RIG 298 ON 06/23/2009 @ 0330 HRS. |   |                                       |   |  |  |  |  |
| NAME (PLEASE PRINT)<br>Sheila Wopsock   | <b>PHONE NUMBER</b><br>435 781-7024                             | TITLE<br>Regulatory Analyst           |   |  |  |  |  |
| SIGNATURE   | 433 /01-/024  | DATE                                  |   |  |  |  |  |
| SIGNATURE<br>  N/A  |   | 6/24/2009                             |   |  |  |  |  |

|  | STATE OF UTAH   |   | FORM 9  |
|--|---|---|---|
|  | DEPARTMENT OF NATURAL RESOURD<br>DIVISION OF OIL, GAS, AND MI   |   | 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461 |
| SUNDE  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>UTE  |   |   |
|  | sals to drill new wells, significantly deepe<br>ugged wells, or to drill horizontal laterals.   |   | 7.UNIT or CA AGREEMENT NAME:<br>NATURAL BUTTES  |
| 1. TYPE OF WELL<br>Gas Well                                      |   |   | 8. WELL NAME and NUMBER:<br>NBU 922-18I3S       |
| 2. NAME OF OPERATOR:<br>KERR-MCGEE OIL & GAS ONS                 | HORE, L.P.  |   | 9. API NUMBER:<br>43047398440000                |
| <b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S       | treet, Suite 600, Denver, CO, 80217 377   | <b>PHONE NUMBER:</b> 720 929-6007 Ext                         | 9. FIELD and POOL or WILDCAT:<br>NATURAL BUTTES |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1470 FSL 2539 FEL |   |   | COUNTY:<br>UINTAH                               |
| QTR/QTR, SECTION, TOWNSHI<br>Qtr/Qtr: NWSE Section: 18           | r, Range, Meribian:<br>Township: 09.0S Range: 22.0E Meridian  | : S   | STATE:<br>UTAH                                  |
| 11. CHE  | CK APPROPRIATE BOXES TO INDICA  | ATE NATURE OF NOTICE, REPORT,                                 | OR OTHER DATA                                   |
| TYPE OF SUBMISSION   |   | TYPE OF ACTION  |   |
| □ NOTICE OF INTENT   | ☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS  | ☐ ALTER CASING ☐ CHANGE TUBING                                | ☐ CASING REPAIR ☐ CHANGE WELL NAME              |
| Approximate date work will start:                                | CHANGE WELL STATUS  | COMMINGLE PRODUCING FORMATIONS                                | CONVERT WELL TYPE                               |
| SUBSEQUENT REPORT Date of Work Completion:                       | DEEPEN  | FRACTURE TREAT  | ☐ NEW CONSTRUCTION                              |
|  | OPERATOR CHANGE   | PLUG AND ABANDON  | ☐ PLUG BACK                                     |
| SPUD REPORT Date of Spud:  | PRODUCTION START OR RESUME  | RECLAMATION OF WELL SITE                                      | RECOMPLETE DIFFERENT FORMATION                  |
| Date or Spud:  | REPERFORATE CURRENT FORMATION   | SIDETRACK TO REPAIR WELL                                      | ☐ TEMPORARY ABANDON                             |
| ✓ DRILLING REPORT  | ☐ TUBING REPAIR   | ☐ VENT OR FLARE   | ☐ WATER DISPOSAL                                |
| Report Date: 9/28/2009   | │   | ☐ SI TA STATUS EXTENSION                                      | APD EXTENSION                                   |
| 3/20/2003  | ☐ WILDCAT WELL DETERMINATION  | OTHER   | OTHER:  |
| THE SUBJECT WELL \   | OMPLETED OPERATIONS. Clearly show all power of the Company of the | ON ON 09/28/2009 AT 8:30<br>OLOGICAL WELL HISTORY.<br>U<br>Oi |   |
| NAME (PLEASE PRINT)<br>Andy Lytle                                | <b>PHONE NUMBE</b> 720 929-6100   | R TITLE<br>Regulatory Analyst                                 |   |
| SIGNATURE<br>N/A   |   | <b>DATE</b> 9/30/2009   |   |

### **Operation Summary Report**

| Well: NBU 922-1813S ( YELLOW ) | Spud Conductor: 12/16/2008 | Spud Date: 2/23/2009                     |
|--------------------------------|----------------------------|--|
| Project: UTAH-UINTAH           | Site: NBU 922-18J PAD      | Rig Name No: ELENBURG 12/12, H&P 298/298 |
| Event: DRILLING                | Start Date: 2/21/2009      | End Date: 6/23/2009                      |

Active Datum: RKB @4,887.00ft (above Mean Sea UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,442.00/E/0/2,580.00/0/0

| Active Datum: RKB @4,887.00ft (above Mean Sea |                   |                  |        |      |             |     | TTE. GO. E. G.E., GG. GO. G. G |  |
|---|-------------------|------------------|--------|------|-------------|-----|--------------------------------|--|
| Date  | Time<br>Start-End | Duration<br>(hr) | Phase  | Code | Sub<br>Code | P/U | MD From<br>(ft)                | Operation  |
| 2/23/2009                                     | 0:00 - 7:00       | 7.00             | MIRU   | 01   | E           | Р   | # 0.75 in the                  | RDRT   |
|   | 7:00 - 14:30      | 7.50             | MIRU   | 01   | Α           | Р   |                                | SKID & RURT  |
|   | 14:30 - 0:00      | 9.50             | DRLSUR | 02   | D           | Р   |                                | DRILL & SLIDE F/85 TO 620, SLIDING 15' OF STANDS   |
| 2/24/2009                                     | 0:00 - 11:00      | 11.00            | DRLSUR | 02   | D           | Р   |                                | DRILL & SLIDE F/620 TO 1365,SLIDE 20' EVERY 90',SURVEY EVERY 90'   |
|   | 11:00 - 11:30     | 0.50             | DRLSUR | 07   | Α           | Р   |                                | RIG SERVICE  |
|   | 11:30 - 19:30     | 8.00             | DRLSUR | 02   | D           | Р   |                                | DRILL & SLIDE F/1365 TO 1710   |
|   | 19:30 - 20:30     | 1.00             | DRLSUR | 80   | В           | Z   |                                | WORK ON PUMP   |
|   | 20:30 - 0:00      | 3.50             | DRLSUR | 02   | D           | P   |                                | DRILL & SLIDE F/1710-1820  |
| 2/25/2009                                     | 0:00 - 9:00       | 9.00             | DRLSUR | 02   | D           | Р   |                                | DRILL & SLIDE F/1820 TO 2020', SLIDE & SURVEY EVERY 90'  |
|   | 9:00 - 12:30      | 3.50             | DRLSUR | 06   | Α           | Р   |                                | BITTRIP,NO PROBLEMS  |
|   | 12:30 - 0:00      | 11.50            | DRLSUR | 02   | D           | Р   |                                | DRILL& SLIDE,F/2020' TO 2335', SLIDE & SURVEY EVERY 90'  |
| 2/26/2009                                     | 0:00 - 7:00       | 7.00             | DRLSUR | 02   | D           | Р   |                                | DRILL&SLIDE 70%F/2335 TO2470,SURVEY<br>EVERY 30'   |
|   | 7:00 - 8:00       | 1.00             | DRLSUR | 05   | С           | S   |                                | CIRC TO LDDP   |
|   | 8:00 - 11:00      | 3.00             | DRLSUR | 06   | Α           | P   |                                | LDDP & DIR TOOLS   |
|   | 11:00 - 15:30     | 4.50             | CSG    | 12   | С           | Р   |                                | R/U RUN 57 JTS 9.625 CSG TO 2443'  |
|   | 15:30 - 21:00     | 5.50             | CSG    | 12   | E           | Р   |                                | PUMP 230SX LEAD,200SX TAIL,DISP 187BBLS<br>WATER,,TOP OUT 125SX,FELL BACK,PUMP<br>100SX,STAYED FULL  |
|   | 21:00 - 0:00      | 3.00             | CSG    | 13   | Α           | P   |                                | WAIT ON CEMENT TO TAKE OFF LANDING<br>JT,RELEASE RIG @ MIDNITE 2/26/08   |
| 6/12/2009                                     | 12:00 - 12:30     |                  | DRLPRO | 01   | С           | Р   |                                | SKID RIG FROM NBU 92218P2S TO NBU<br>922-18I3S   |
|   | 12:30 - 13:30     |                  | DRLPRO | 14   | Α           |     |                                | SET AND TEST D.T.O. ON WELLWEAD / NIPPLE<br>UP FLOW LINE, FILL UP LINE AND STABILIZER<br>CABLES / PRE SPUD INSPECTION  |
|   | 13:30 - 18:30     | 5.00             | DRLPRO | 15   | <b>A</b>    | Р   |                                | PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES, HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE + SURFACE CASING TO 1500 PSI @ 30 MINUTES -FUNCT TEST CLOSING UNIT, INSTALL WEAR BUSHING |
|   | 18:30 - 21:00     | 2.50             | DRLPRO | 06   | Α           | Р   |                                | PICK UP M MTR,MAKE UP BIT,ORIENT<br>DIRECTIONAL TOOLS,TIH W/ BHA,PU 27 JTS<br>NEW HARD BANDED PIPE ,TIH TO 2325",INSTALL<br>ROTATING HEAD, FILL PIPE,TAG CMT @2359'  |
|   | 21:00 - 22:00     |                  | DRLPRO |      | F           | Р   |                                | DRILL CMT & FE ,FLOAT @ 2418',CSG SHOE @2462'  |
|   | 22:00 - 22:30     |                  | DRLPRO |      | Α           | Р   |                                | RIG SERVICE  |
|   | 22:30 - 23:00     |                  | DRLPRO |      | D           | Р   |                                | SPUD IN & DRILL 10' FORMATION, 2485-2495   |
|   | 23:00 - 23:30     |                  | DRLPRO |      |             | Р   |                                | PREFORM FIT, SURFACE PRESSURE TO 300 PSI<br>EMW 11.0 PPG   |
|   | 23:30 - 0:00      | 0.50             | DRLPRO | 02   | D           | P   |                                | DRILL(ROTATE) 2495-2533=38=76FPH WOB<br>12-16,PUMP SPM 100,GPM 450,SPP ON/OFF<br>1530/1230,TQ ON/OFF 4/2,PU/SO/ROT 104/92/98   |

9/30/2009 7:28:25AM

### **Operation Summary Report**

Spud Conductor: 12/16/2008 Spud Date: 2/23/2009 Well: NBU 922-18I3S ( YELLOW ) Project: UTAH-UINTAH Site: NBU 922-18J PAD Rig Name No: ELENBURG 12/12, H&P 298/298 Event: DRILLING Start Date: 2/21/2009 End Date: 6/23/2009

| Event: DRILLIN            | G                 |                  | Start Dat | (e: 2/21/ | 2009        |           |              | End Date: 6/23/2009  |
|---------------------------|-------------------|------------------|-----------|-----------|-------------|-----------|--------------|--|
| Active Datum: R<br>Level) | RKB @4,887.00ft ( | above Mear       | n Sea     | UWI: 0    | /9/S/22/E   | E/18/0/NV | VSE/6/PM/S/1 | ,442.00/E/0/2,580.00/0/0   |
| Date                      | Time<br>Start-End | Duration<br>(hr) | Phase     | Code      | Sub<br>Code | PAU       | MD From (ft) | Operation  |
| 6/13/2009                 | 0:00 - 6:00       | 6.00             | DRLPRO    | 02        | D           | P         | 100          | DRILL(ROTATE & SLIDE 2533-2838=305=50.8<br>FPH WOB 12-16,PUMP SPM 105,GPM 470,SPP<br>ON/OFF 1330/1130,TQ ON/OFF 4/2,PU/SO/ROT<br>104/92/98 SLIDES-52'/ 55 MIN  |
|                           | 6:00 - 8:30       | 2.50             | DRLPRO    | 02        | D           | Р         |              | DRILL(ROTATE & SLIDE 2838-3028=-76= FPH WOB 12-16,PUMP SPM 105,GPM 472,SPP ON/OFF 1330/1130,TQ ON/OFF 4/2,PU/SO/ROT 104/92/98  |
|                           | 8:30 - 15:30      | 7.00             | DRLPRO    | 10        | D           | X         |              | RUN 30' CHECK SHOT @2976' HAD BAD MAGNATIC INTERFERENCE, AS PER SCIENTIFIC PERSONALL, RECOMEND, THAT WE, NOT DRILL ANY MORE, MAY POSSIBLY BE IN CONTACT WITH OLD WELL( NBU 12)RUN CHECK SHOTS UP HOLE EVERY 5' F/2976 TO 2913'(ALL SHOTS GOOD)DO ROLL TEST ON MWD, GOOD, SCIENTIFIC SENDING ALL SURVEY   |
|                           |                   |                  |           |           |             |           |              | DATA TO DENVER UN ABLE TO DETERMINE<br>FORMATION OR OLD WELL,THAT CAUSED<br>INTERFERENCE,DRILL AHEAD 5',SURVEY<br>GOOD,DRILL 5' SURVEY GOOD,DRILL 5' SURVEY<br>GOOD,   |
|                           | 15:30 - 0:00      | 8.50             | DRLPRO    | 02        | D           | P         |              | DRILL(ROTATE & SLIDE 3074-3567=493=61.6<br>FPH WOB 14-18,PUMP SPM 105,GPM 472,SPP<br>ON/OFF 1425/1240,TQ ON/OFF 6/3,PU/SO/ROT<br>120/100/102 SLIDES-217'-4.25 HRS=48%  |
| 6/14/2009                 | 0:00 - 6:00       | 6.00             | DRLPRO    | 02        | D           | Р         |              | -DRILL (ROTATE & SLIDE) 3567-3944=377'=62.8<br>FPH,WOB 14-18,RPM TOP DRIVE,35,M MTR<br>104,SPM 105,GPM 472,SPP ON/OFF 1450/1200,TQ<br>ON/OFF 7/4,PU/SO/ROT 125/100/114. MW 8.7,H20<br>+POLY,+PUMP SWEEPS (SLIDES 102' IN 2.67<br>HRS=42%   |
|                           | 6:00 - 16:30      | 10.50            | DRLPRO    | 02        | D           | Р         |              | DRILL (ROTATE & SLIDE)3944-4607=663'=63.1 FPH,WOB 16-20,RPM TOP DRIVE,35,M MTR 89,SPM 90,GPM 405,SPP ON/OFF 1285/1050,TQ ON/OFF 9/5,PU/SO/ROT 135/102/120. MW 8.7,H20 +POLY,+PUMP SWEEPS (SLIDES 270' IN 5.40 HRS=49%  |
|                           | 16:30 - 17:00     | 0.50             | DRLPRO    | 07        | Α           | P         |              | RIG SERVICE FUNCT TEST PIPE RAMS   |
|                           | 17:00 - 0:00      | 7.00             | DRLPRO    | 02        | D           | Р         |              | DRILL (ROTATE & SLIDE)4607-4607=663'=63.1<br>FPH,WOB 16-22,RPM TOP DRIVE,35,M MTR<br>89,SPM 95,GPM 426,SPP ON/OFF 1300/1075,TQ<br>ON/OFF 11/7,PU/SO/ROT 1148/108/127. MW<br>8.7,H20 +POLY,+PUMP SWEEPS (SLIDES 270' IN<br>5.4. HRS=49%   |
| 6/15/2009                 | 0:00 - 6:00       | 6.00             | DRLPRO    | 02        | С           | P         |              | -DRILL (ROTATE & SLIDE) 5048-5396=348'=58.8 FPH,WOB 16-22,RPM TOP DRIVE,35,M MTR 89,SPM 95,GPM 405,SPP ON/OFF 1375/1100,TQ ON/OFF 11/7,PU/SO/ROT 154/112/132. MW 8.7,H20 +POLY,+PUMP SWEEPS (SLIDES 63' IN 2. HRS=33%, STARTED DROP @ 5024' SLIDING 12-15' EVERY 90 TO KEEP DROP RATE AROUND 1.5- 2 DEG. |
|                           | 6:00 - 16:00      | 10.00            | DRLPRO    | 02        | D           | Р         |              | DRILL (ROTATE & SLIDE) F/5396-6218=822'=82.FPH,WOB 16-22,RPM TOP DRIVE,35,M MTR 104, SPM 105,GPM 472,SPP ON/OFF 1640/1420,TQ ON/OFF 11/9,PU/SO/ROT 170/120/142. MW 8.7,H20 +POLY,+PUMP SWEEPS (SLIDES 85' IN 2.45 HRS=27.5%,   |
|                           | 16:00 - 16:30     | 0.50             | DRLPRO    | 07        | Α           | Р         |              | RIG SERVICE, FUNCT TEST PIPE RAMS  |

9/30/2009

### Operation Summary Report

Spud Conductor: 12/16/2008 Spud Date: 2/23/2009 Well: NBU 922-18I3S ( YELLOW ) Project: UTAH-UINTAH Site: NBU 922-18J PAD Rig Name No: ELENBURG 12/12, H&P 298/298 Event: DRILLING Start Date: 2/21/2009 End Date: 6/23/2009 Active Datum: RKB @4,887.00ft (above Mean Sea UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,442.00/E/0/2,580.00/0/0 Level) Time Duration **MD** From Operation Date Phase Code Sub P/U Start-End (hr) Code (ft)DRLPRO 16:30 Р - 0:00 7.50 02 DRILL (ROTATE & SLIDE F/6218-D 6716=498'=66.4.FPH.WOB 16-22.RPM TOP DRIVE,35,M MTR 104, SPM 105,GPM 472,SPP ON/OFF 1750/1515,TQ ON/OFF 14/12,PU/SO/ROT 182/125/155. MW 8.7,H20 +POLY,+PUMP SWEEPS (SLIDES 40' IN 2.75 HRS=45% (BOP DRILL 46 SEC) 6/16/2009 0:00 - 6:00 6.00 **DRLPRO** С Р 02 DRILLING ROTATE & SLIDE) F/ 6716-7005=289=48.1 FPH,WOB 16-24, TD RPM 40,M MTR 104, SPM 105,GPM 472,SPP ON/OFF 1750/1550,TQ ON/OFF 14/12, PU/SO/ROT/ 200/130/160, MW 8.7 H20+POLY+PUMP SWEEPS. (SLIDES) 40' IN 2.75 HR= 45 %. 6:00 - 17:00 11.00 **DRLPRO** 02 D Ρ . DRILLING ROTATE-F/ 7005-7538=533=48.4 FPH,WOB 16-24, TD RPM 30-40,M MTR 104, SPM 105,GPM 472,SPP ON/OFF 1820/1620,TQ ON/OFF 15/11. PU/SO/ROT/ 218/140/1605, DISPLACE HOLE W /FW,LIGHT MUD UP MW 9.4 VIS 32 17:00 - 17:30 0.50 DRLPRO 07 Α Р RIG SERVICE DRILLING ROTATE F/7538-7759=221=34 17:30 - 0:00 6.50 DRLPRO 02 D Ρ FPH, WOB 16-24, TD RPM 30-40, M MTR 104, SPM 105,GPM 472,SPP ON/OFF 2025/1760,TQ ON/OFF 15/13, PU/SO/ROT 225/136/170,MW 9.8 VIS 34 0:00 6/17/2009 - 6:00 6.00 **DRLPRO** 02 D Р DRILLING F/ 7759-7960=201'=33.5 FPH,WOB ,14-24,TR RPM 30-40,M MTR 104,SPM 105,GPM 472,SPP ON/OFF 2050/1760,TQ ON/OFF 15/12,PU/SO/ROT 240/140/172,MW 9.8 VIS 34 L 6:00 - 18:00 12.00 **DRLPRO** 02 С Р DRILLING F/ 7960-8285=325'=27 FPH.WOB ,14-24,TR RPM 30-40,M MTR 104,SPM 105,GPM 472,SPP ON/OFF 2460/2300,TQ ON/OFF 16/12,PU/SO/ROT 255/135/175 MW 10.1 VIS 36 18:00 - 22:00 DRLPRO 4 00 06 Α TRIP F/ BIT ROTATE/PUMP OUT F/ 8285' - T/ 7720' / P.O.O.H. F/ 7720' - T/ 7440 W/O PUMP / ROTATE / PUMP PILL / P.O.O.H. WITH BIT #1 WORK BLIND & PIPE RAMS 22:00 - 23:30 1.50 **DRLPRO** 06 Α CHANGE OUT MOTORS & BITS / INSTALL & ORIENTATE MWD TOOLS / PERFORM SURFACE TEST ON MWD TOOLS 23:30 - 0:00 0.50 **DRLPRO** 06 Α Ρ TIH W / BHA 0:00 6/18/2009 - 2:30 2.50 DRLPRO 06 Α Р TIH W/ BIT #2,BREAK CIRC @ 2400 - 5500',CIH 2:30 - 3:00 0.50 DRLPRO 03 D Р PRECAUTIONARY, REAM 75' TO BTM, 8' FILL 3:00 - 6:00 3.00 DRLPRO 02 D Ρ DRILLING F/ 8285-8390=105'=29,2FPH.WOB ,14-24,TR RPM 30-40,M MTR 76,SPM 110,GPM 495,SPP ON/OFF 2460/2300,TQ ON/OFF 18/16,PU/SO/ROT 250/135/176 MW 10.2 VIS 36 6:00 DRILLING F/8390-8772=382'=38.2 FPH.WOB - 16:00 10.00 **DRLPRO** 02 D Р ,14-18,TR RPM 30-40,M MTR 72,SPM 105,GPM 472 SPP ON/OFF 2460/2300,,PU/SO/ROT 280/140/180 MW 10.4 VIS 38 TQ ON/OFF BTM 20/19, HIGH TQ STALLING TOP DRIVE, 16:00 - 19:30 3.50 **DRLPRO** 06 Ε Р 20 STD WIPER TRIP TO 6850' DUE TO TOP DRIVE TORQUE, WASH & REAM TO BTM 19:30 - 0:00 02 Ρ 4.50 **DRLPRO** D DRILLING F/8772-8900=128'=28.4 FPH,WOB .14-18.TR RPM 30-40.M MTR 72.SPM 105.GPM 472,SPP ON/OFF 2500/2300,,PU/SO/ROT 290/145/190 MW 10.7 VIS 38 TQ ON BTM 17/19

OFF 14/15 ,SLI DE TIME 22% 17' -1 HR

### **Operation Summary Report**

 Well: NBU 922-18/3S (YELLOW)
 Spud Conductor: 12/16/2008
 Spud Date: 2/23/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18/J PAD
 Rig Name No: ELENBURG 12/12, H&P 298/298

 Event: DRILLING
 Start Date: 2/21/2009
 End Date: 6/23/2009

| Event: DRILLI           | NG                |                  | Start Dat | te: 2/21/ | 2009        | 009 End Date: 6/23/2009 |              |   |  |
|-------------------------|-------------------|------------------|-----------|-----------|-------------|-------------------------|--------------|---|--|
| Active Datum:<br>Level) | RKB @4,887.00ft ( | (above Mear      | n Sea     | UWI: 0    | /9/S/22/E   | /18/0/ <b>NW</b>        | /SE/6/PM/S/1 | ,442.00/E/0/2,580.00/0/0  |  |
| Date                    | Time<br>Start-End | Duration<br>(hr) | Phase     | Code      | Sub<br>Code | P/U                     | MD From      | Operation   |  |
| 6/19/2009               | 0:00 - 6:00       | 6.00             | DRLPRO    | 02        | D           | P                       |              | DRILLING (ROTATE & SLIDE) F/ 8900-9050=150=25 FPH,WOB ,14-18,TR RPM 30-50,M MTR 72,SPM 105,GPM 472,SPP ON/OFF 2500/2300,TQ ON/ 15/19 ,OFF 14/15 ,PU/SO/ROT 300/140/185,MW 11.0 VIS 44, LAST SURVEY 8907 INC 1.63 AZM 155.98,, 11.5' SOUTH ' OF CENTER, (SLIDES 25' 1 HR= 16% OF DRILLING TIME |  |
|                         | 6:00 - 7:00       | 1.00             | DRLPRO    | 05        | Α           | Х                       |              | CCH,WORK PIPE,DUE TO TORQUE AFTER SLIDE   |  |
|                         | 7:00 - 15:00      | 8.00             | DRLPRO    | 02        | D           | Р                       |              | DRILLING (ROTATE ) F/9050-9240=190=23.76<br>FPH,WOB ,14-18,TR RPM 30-50,M MTR 72,SPM<br>105,GPM 472,SPP ON/OFF 2550/2475,TQ ON/<br>15/20 ,OFF 14/19 ,PU/SO/ROT 300/140/185,MW<br>11.6 VIS 44,   |  |
|                         | 15:00 - 15:30     | 0.50             | DRLPRO    | 07        | Α           | Р                       |              | RIG SERVICE ,WORK PIPE RAMS   |  |
|                         | 15:30 - 17:00     | 1.50             | DRLPRO    | 02        | D           | Р                       |              | DRILLING (ROTATE ) F/9240-9285=45=30<br>FPH,WOB ,14-18,TR RPM 30-50,M MTR 72,SPM<br>105,GPM 472,SPP ON/OFF 2550/2375,TQ ON/<br>17/20 ,OFF 14/19 ,PU/SO/ROT 300/140/185,MW<br>11.7 VIS 44,   |  |
|                         | 17:00 - 18:00     | 1.00             | DRLPRO    | 05        | С           | Р                       |              | CCH,RAISE MUD WT TO 11,8 TO CONTOL<br>GAS,PRIOR TO TRIP   |  |
|                         | 18:00 - 23:00     | 5.00             | DRLPRO    | 06        | Α           | Р                       |              | TOH,TO CHANGE BHA,ROTATE & PUMP F/9285<br>TO 8450,50-130 OVER,STRAIGHT PULL F/8450 TO<br>8100' 40/110 OVER,PUMP SLUG, TOH   |  |
|                         | 23:00 - 0:00      | 1.00             | DRLPRO    | 06        | Α           | Р                       |              | BREAK BIT LD M MTR,DIRECTIONAL TOOLS,PU<br>M MTR & BIT,FLEX NMDC,18 JTS HWDP.   |  |
| 6/20/2009               | 0:00 - 1:30       | 1.50             | DRLPRO    | 06        | Α           | P                       |              | TRIP IN HOLE TO CSG SHOE,INSTALL ROT<br>RUBBER, BREAK CIRC,(BHA= BIT, M MTR,FLEX<br>NMDC,18HWDP=22,000 BIT WT)  |  |
|                         | 1:30 - 2:30       | 1.00             | DRLPRO    | 09        | Α           |                         |              | SLIP & CUT DRILL LINE   |  |
|                         | 2:30 - 5:30       | 3.00             | DRLPRO    | 06        | Α           | Р                       |              | TIH,BREAK CIRC @ 6250',CIH (TIGHT SPOT 7250')<br>TIH TO 9200'   |  |
|                         | 5:30 - 6:00       | 0.50             | DRLPRO    | 03        | D           | P                       |              | WASH & REAM F/ 9200-9285', 6 FT FILL,TQ 13/16,<br>30 BBL MUD LOSS ON TRIP   |  |
|                         | 6:00 - 16:00      | 10.00            | DRLPRO    | 02        | В           | Р                       |              | DRILLING F9285-9700=415=41.5 FPH,WOB<br>,14-18,TR RPM 30-50,M MTR 72,SPM 105,GPM<br>472,SPP ON/OFF 2620/2470,TQ ON/OFF 18 /16<br>,PU/SO/ROT 280/140/185,MW 11.8 VIS 41  |  |
|                         | 16:00 - 16:30     | 0.50             | DRLPRO    | 07        | Α           | Р                       |              | RIG SERVICE, FUNCT PIPE RAMS  |  |
|                         | 16:30 - 0:00      | 7.50             | DRLPRO    | 02        | В           | Р                       |              | DRILLING F9285-9700=415=41.5 FPH,WOB<br>,14-18,TR RPM 30-50,M MTR 72,SPM 105,GPM<br>472,SPP ON/OFF 2620/2470,TQ ON/OFF 20 /18<br>,PU/SO/ROT 300/140/185,MW 11.8 VIS 41  |  |
| 6/21/2009               | 0:00 - 3:30       | 3.50             | DRLPRO    | 02        | В           | Р                       |              | DRILLING F/9900-9963=63=18 FPH,WOB 16-22<br>,MTR RPM 30-50,M MTR 72,SPM 105,GPM<br>472,SPP ON/OFF 2620/2450,TQ ON/OFF 20 /18<br>,PU/SO/ROT 300/140/185,MW 11.9 VIS 41   |  |
|                         | 3:30 - 7:30       | 4.00             | DRLPRO    | 06        | E           | Х                       |              | HIGH TORQUE,20 STAND WIPER TRIP,BACK<br>REAM TO 8500' DRAG UP 40/130 OVER,LOST 30<br>BBLS MUD ON TRIP   |  |
|                         | 7:30 - 13:00      | 5.50             | DRLPRO    | 02        | В           | P                       |              | DRILLING F/9963-10,019=56=10.1.FPH,TD @ 10,019'@ 1300 HRS 6/21/2009, 'WOB 16-22, MTR RPM 30-50,M MTR 72,SPM 105,GPM 472,SPP ON/OFF 2620/2450,TQ ON/OFF 20 /18,PU/SO/ROT 300/130/185,MW 11.9 VIS 41, LOST 60 BBLS MUD RAISE LCM TO 5%  |  |
|                         | 13:00 - 14:00     | 1.00             | DRLPRO    | 05        | С           | ₽                       |              | CCH F/ LOGS,PUMP SWEEP  |  |
|                         | 14:00 - 17:30     | 3.50             | DRLPRO    | 06        | Ε           | P                       |              | WIPER TRIP TO CSG SHOE,HOLE GOOD  |  |
|                         | 17:30 - 20:30     | 3.00             | DRLPRO    | 06        | Ε           | Ρ                       |              | TIH, BREAK CIRC @ 6500',CIH TO 9983   |  |

9/30/2009 7:28:25AM

### **Operation Summary Report**

Spud Conductor: 12/16/2008 Spud Date: 2/23/2009 Well: NBU 922-18I3S ( YELLOW )

Site: NBU 922-18J PAD Rig Name No: ELENBURG 12/12, H&P 298/298 Project: UTAH-UINTAH

Event: DRILLING Start Date: 2/21/2009 End Date: 6/23/2009

| Event. DRILLII          | 10                             |               | Clair Da         | le. 2/2 1/2 |             |          |               | Life Date. 0/23/2009   |
|-------------------------|--------------------------------|---------------|------------------|-------------|-------------|----------|---------------|--|
| Active Datum:<br>Level) | RKB @4,887.00ft (              | above Mean    | Sea              | UWI: 0      | /9/S/22/E   | /18/0/NV | VSE/6/PM/S/1, | 442.00/E/0/2,580.00/0/0  |
| Date                    | Time<br>Start-End              | Duration (hr) | Phase            | Code        | Sub<br>Code | P/U      | MD From (ft)  | Operation  |
|                         | 20:30 - 22:30<br>22:30 - 23:00 | 2.00          | DRLPRO<br>DRLPRO | 05<br>10    | F<br>B      | P<br>P   | <b>→</b>      | BREAK CIRC,WASH TO 10,019,CIRC 2 SWEEPS<br>AROUND,BTMS UP GAS 8900 UNITS,NO FLARE<br>DROP SINGLE SHOT DIRECTIONAL SURVEY   |
|                         | 23:00 - 0:00                   | 1.00          | DRLPRO           | 06          | В           | P        |               | TOH F/ LOGS ,BACK REAM OUT 7 STDS TO 9360'<br>40/120 OVER, STRAIGHT PULL, 40/125 OVER,   |
| 6/22/2009               | 0:00 - 3:30                    | 3.50          | DRLPRO           | 06          | В           | Р        |               | FINISH TOH,FLOW CHECK @ CSG SHOE,TIGHT<br>SPOT 3680'   |
|                         | 3:30 - 4:00                    | 0.50          | DRLPRO           | 06          | В           | Р        |               | L/D FLEX MONEL,M MTR & BIT   |
|                         | 4:00 - 6:00                    | 2.00          | DRLPRO           | 21          | D           | Z        |               | HALLIBUTON ON LOCATION, HAVING PROBLEMS W/TRUCK,ANOTHER ON THE WAY   |
|                         | 6:00 - 12:30                   | 6.50          | DRLPRO           | 11          | G           | Р        |               | SM RIG UP HALCO,RUN TRIPLE COMBO F/<br>10,012' TO SURFACE,RD SAME  |
|                         | 12:30 - 13:00                  | 0.50          | DRLPRO           | 14          | В           | Р        |               | PULL WEAR BUSHING  |
|                         | 13:00 - 20:30<br>20:30 - 22:30 | 7.50          | DRLPRO           | 12<br>05    | C<br>D      | Р        |               | SM W /FRANKS RU & RUN 237 JTS I-80 #11.6<br>LT&C 4.5 CASING + RELATED TOOLS /<br>BREAKING CIRCULATION @ SELECTED<br>INTERVALS /' INSTALL MANDREL & ROTATING<br>RUBBER / LAND CASING @, 10012.'W/ 80K TOP<br>OF FLOAT COLLAR @ 9991.<br>CIRC CSG,R.D.M.O. CASING EQUIP,M.I.R.U. BJ  |
|                         |                                | 2.00          |                  |             |             |          |               | HSM TRIP GAS,8980 UNITS 6' FLARE   |
|                         | 22:30 - 0:00                   | 1.50          | DRLPRO           | 12          | E           | P        |               | TEST PUMPS & LINES TO 5000 PSI / PUMP 40 BBLS H2O +615 SX LEAD CEMENT @ 11.8ppg (PREM LITE II I + .25 pps CELLOFLAKE ,5 pps KOL + 8% GEL + .5% SMS EXTENDER + 13.67 gal/sx, 2.42 yield) + 1320 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ + 10% SALT + 2% GEL + .2% R3 = 5.90 gal/sx, 1.31 yield) / DROP PLUG & DISPLACE W/ 155.4. BBLS H2O + ADDITIVES / DID NOT BUMP PLUG / LIFT PRESSURE @ 2630 PSI ,FLOATS HELD,W/ 1.75 BBLS BACK TO INVENTORY LOST RETURNS @ 125 BBLS IN DISP W/25 BBLS LEAD CMT TO PIT (CALC TOP OF TAIL @3660                      |
| 6/23/2009               | 0:00 - 1:30                    | 1.50          | DRLPRO           |             | E           | P        |               | - TEST PUMPS & LINES TO 5000 PSI / PUMP 40 BBLS H2O +615 SX LEAD CEMENT @ 11.8ppg (PREM LITE II I + .25 pps CELLOFLAKE ,5 pps KOL + 8% GEL + .5%SMS EXTENDER + 13.67 gal/sx, 2.42 yield) + 1320 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ + 10% SALT + 2% GEL + .2% R3 = 5.90 gal/sx, 1.31 yield) / DROP PLUG & DISPLACE W/ 155.4. BBLS H2O + ADDITIVES / DID NOT BUMP PLUG / LIFT PRESSURE @ 2630 PSI ,FLOATS HELD,W/ 1.75 BBLS BACK TO INVENTORY LOST RETURNS @ 125 BBLS IN DISP W/25 BBLS LEAD CMT TO PIT (CALC TOP OF TAIL @3660,R.D.M.O. CMT EQUIP. |
|                         | 1:30 - 2:30                    | 1.00          | DRLPRO           |             | В           | P        |               | L/D LANDING JT,SET & TEST PACK OFF TO 5000#<br>FOR 15 MIN  |
|                         | 2:30 - 3:30                    | 1.00          | DRLPRO           | 14          | Α           | Р        |               | NIPPLE DOWN & RAISE BOP STACK,PREP TO SKID,RIG RELEASED @ 0330 HRS ON 06/23/2009 TO NBU 922-18JIS  |

### **Operation Summary Report**

 Well: NBU 922-18I3S (YELLOW)
 Spud Conductor: 12/16/2008
 Spud Date: 2/23/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18J PAD
 Rig Name No: GWS 1/1, MILES-GRAY 1/1

 Event: COMPLETION
 Start Date: 8/23/2009
 End Date: 9/25/2009

Active Datum: RKB @4,887.00ft (above Mean Sea

UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,442.00/E/0/2,580.00/0/0

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| Level)    |                   |               |       |      |             |     |   |
|-----------|-------------------|---------------|-------|------|-------------|-----|---|
| Date      | Time<br>Start-End | Duration (hr) | Phase | Code | Sub<br>Code | P/U | MD From Operation (ft)  |
| 9/18/2009 | 6:00 - 6:15       | 0.25          | COMP  | 48   |             | Р   | JSA-SAFETY MEETING #1, DAY 1  |
|           | 6:15 - 8:30       | 2.25          | COMP  | 30   | Α           | Р   | ROAD RIG FROM BONANZA 1023-7G TO LOC,<br>MIRU, N/D FRAC VALVE, N/U BOPS,  |
|           | 8:30 - 15:00      | 0 6.50        | COMP  | 31   | I           | Р   | P/U 3 7/8" BIT AND SUB, TIH W/ 2 3/8" L-80 TBG W<br>TALLY TBG IN HOLE, RIH TO 9987' 315 JTS,<br>HOOK UP CIRC WELL W/ GETTING CEMENT AND<br>BS BACK, R/U WIRELINE RIH CHECK DEPTH,<br>9987', R/D WIRELINE,   |
|           | 15:00 - 18:00     | 3.00          | COMP  | 31   | I           | Р   | TOOH W/ LAYING DN 2 3/8" TBG ON TRAILER,<br>LAY DN @ 175 JTS ONTRAILER, SWI SDFN,   |
| 9/19/2009 | 7:00 - 7:15       | 0.25          | COMP  | 48   |             | Р   | JSA-SAFETY MEETING #2, DAY 2  |
|           | 7:15 - 10:00      | 0 2.75        | COMP  | 31   | i           | Р   | NO PRESSURE ON WELL, TOOH LAY TBG DN ON<br>TRAILER, R/D FLOOR AND TBG EQUIP, N/D<br>BOPS, N/U FRAC VALVE, PRESSURE TEST CSG<br>& FRAC VALVE TO 7200# OK, R/D SERVICE UNIT<br>MOVE OFF LOC,  |
|           | 10:00 - 12:00     | 0 2.00        | COMP  | 37   | С           | P   | ( STG #1 PERF ) R/U CASEDHOLE SOLUTIONS<br>WIRELINE, RIH W/ 3 3/8" PERF GUNS, TAG PBTD<br>@ 9984', PERF THE MEAS VERDE @ 9966' - 9970'<br>4-SPF, 9902' - 9904' 3-SPF, 9844'- 9846' 3-SPF,<br>9776' - 9780' 3-SPF, USING 3 3/8" EXP GUNS, 23<br>GM 0.36 HOLE, 90* PHS, 40 HOLES, |
|           | 7:00 - 15:0       | 0 8.00        | COMP  | 48   |             | Р   | HSM. STG 1) PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH PERF F/ 9966'-70', 4 SPF, 16 HOLES. 9902'-04', 3 SPF, 6 HOLES. 9844'-46', 3 SPF, 6 HOLES. 9776'-80, 3 SPF, 12 HOLES. POOH. SWI.   |
| 9/21/2009 | 11:48 - 17:0      | 0 5.20        | COMP  | 36   | В           | P   | STG 1)11:59 OPEN WELL 1900# BEG PUMP, BRK @ 4655# @ 5.3 BPM. SD ISIP 3100# FG .74. BEG FRAC, EST INJT RT @ 41.2 BPM @ 6002# = 66% PERF'S OPEN. PUMP 78,657# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2800# FG .71. SWI, FRAC CREW X-O T/ BLUE WELL.                   |
|           |                   |               |       |      |             |     | STG 2)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 9684' P/U PERF F/ 9652'-54', 4 SPF, 8 HOLES. 9624'-28'', 4 SPF, 16 HOLES. 9580'-84'', 3 SPF, 12 HOLES. 9488'-90', 3 SPF, 6 HOLES. POOH. SWI, SDFN.                         |
| 9/22/2009 | 7:00 - 7:15       | 0.25          | COMP  | 48   |             | Р   | HSM. SIM OPS.   |
|           |                   |               |       |      |             |     |   |

PUMP 83,308# 30/50 WHITE & TAIL IN W/ 5,000#

20/40 TEC. SD ISIP 2400# FG . 69. 4:35 PM SWI FN. FRAC CREW X-OVER T/ RED.

20/40 TLC.

# 

|  |         | U          | ROCI        | CES RI    | GION          |  |
|--|---------|------------|-------------|-----------|---------------|--|
|  | •       | peral      | ion S       | Umine     | ry Repor      |  |
| Well: NBU 922-18/3S ( YELLOW )                 | Spud C  | Conducto   | r: 12/16/2  | 2008      | Spud Date: 2/ | 23/2009  |
| Project: UTAH-UINTAH                           | Site: N | BU 922-1   | 8J PAD      |           |               | Rig Name No: GWS 1/1, MILES-GRAY 1/1   |
| Event: COMPLETION                              | Start D | ate: 8/23/ | 2009        |           |               | End Date: 9/25/2009  |
| Active Datum: RKB @4,887.00ft (above Multiple) | ean Sea | UWI: 0     | )/9/S/22/E  | E/18/0/NV | VSE/6/PM/S/1, | 442.00/E/0/2,580.00/0/0  |
| Date Time Duration Start-End (hr)              | n Phase | Code       | Sub<br>Code | P/U       | MD From (ft)  |  |
| 7:15 - 7:15 0.00                               | COMP    | 36         | В           | P         |               | STG 2) 7,:25 AM OPEN WELL 1400#. BEG PUMP, BRK @ 2966# @ 5.3 BPM. SD ISIP 2150# FG .65. BEG FRAC, EST INJT RT @ 51.2 BPM @ 5494# =62% PERF'S OPEN. PUMP 54,917# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2900# FG .73  8:AM SWI, FRAC CREW X-OVER T/ BLUE WELL. STG 3)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH T/ 1280' STACKED OUT. LOOK @ WL & FOUND A HIGH STRAND IN LINE. POOH W/ WL. LD GUN & PLUG. MAKE REPAIRS T/ GUN ON LOC. RIH SET CBP @ 9288' P/U PERF F/ 9254'-58', 4 SPF, 16 HOLES. 9190'-92', 4 SPF, 8 HOLES. 9084'-88', 3 SPF, 12 HOLES. PULLED UP F/ 9052'-54', 3 SPF, 6 HOLES. GUN DID NOT SHOOT. POOH. CALL CONNER STAILY. HE SAID DONT SHOOT, JUST FRAC. READY T/ FRAC. 3:48 PM OPEN WELL 1600#. BEG PUMP, BRK @ 3001# @ 6.3 BPM. SD ISIP 2200# FG .67. BEG FRAC, EST INJT RT @ 51.4 BPM @ 4750# =88% PERFS OPEN. |

| ell: NBU 922-1813S ( YELLOW )                     | Spuc Co  | onductor: 12/16/2 | 000 3 | oud Date: 2     |   |
|---|----------|-------------------|-------|-----------------|---|
| oject: UTAH-UINTAH                                | Site: NB | U 922-18J PAD     |       |                 | Rig Name No: GWS 1/1, MILES-GRAY 1/1  |
| vent: COMPLETION                                  |          | te: 8/23/2009     |       |                 | End Date: 9/25/2009   |
| ctive Datum: RKB @4,887.00ft (above Mear<br>evel) | Sea      | UWI: 0/9/S/22/E   |       |                 | ,442.00/E/0/2,580.00/0/0  |
| Date Time Duration Start-End (hr)                 | Phase    | Code Sub<br>Code  | P/U   | MD From<br>(ft) | Operation   |
| 9/23/2009 7:00 - 18:00 11.00                      | COMP     | 36 B              | P     |                 | STG 4)OPEN WELL 2000#. PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .: HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8864' P/U PERF F/ 8828'-34', 4 SPF, 24 HOLES. 8626'-30, 4 SPF, 16 HOLES. POOH. 10:09 AM OPEN WELL 606#. BEG PUMPING, BRK @ 4316# @ 6.3 BPM. SD ISI 2100# FG .67. BEG FRAC, EST INJT RT @ 50.9 BPM @ 4735# = 83% PERF'S OPEN. PUMP 47,646# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2500# FG .72. 10:40 AM SWI, X-OVER T/ RED WELL.  STG 5) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 2 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8584' P/U PERF F/ 8552'-54', 4 SPF, 8 HOLES. 8476'-80', 4 SPF, 16 HOLES. 8476'-80', 3 SPF, 12 HOLES. POOH. 2:28 PM OPEN WELL 700# BEG PUMPING, BRK @ 3288# @ 6.3 BPM. SD IS 1850# FG .65. BEG FRAC, EST INJT RT @ 51 BPM @ 4820# = 63% PERF'S OPEN. PUMP 61,421# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2,000# FG .67. 3:05 SWI. X-OVER T/ BLUE WELL. |
| 9/24/2009 7:00 - 18:30 11.50                      | COMP     | 36 B              | P     |                 | STG 6) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 2<br>GM, .36 HOLE SIZE. 90 DEG PHASING.<br>RIH SET CBP @ 8328' P/U PERF F/<br>8294'-98', 4 SPF, 16 HOLES.<br>8204'-10', 4 SPF, 24 HOLES.<br>POOH. SWI, SDFN.<br>STG 6) 8:AM OPEN WELL 1595#.<br>BEG PUMPING, BRK @ 2170# @ 6.3 BPM. SD IS   |
|   |          |                   |       |                 | 1700# FG .64. BEG FRAC, EST INJT RT @ 51.2 BPM @ 4078#: 100% PERF'S OPEN. PUMP 79,690# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2300# FG .71. 8:48 AM, SWI, X-OVER T/ BLUE WELL.  |
|   |          |                   |       |                 | PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 8154'. POOH. SWI.  ROAD MILES #1 SERVICE UNIT FROM OURAY 34-79 TO LOC, WAIT FOR SCHLUMBERGER TO MOVE OFF LOC., MIRU SERVICE UNIT, N/D FRAC VALVE, N/U BOPS AND TBG EQUIP, P/U 3 7/8" BIT & POBS,   |
|   |          |                   |       |                 | RIH W/ 2 3/8" L-80 TBG TO @ 3150', 100 JTS, S<br>SDFD   |

**Operation Summary Report** Spud Conductor: 12/16/2008 Spud Date: 2/23/2009 Well: NBU 922-18I3S ( YELLOW ) Project: UTAH-UINTAH Site: NBU 922-18J PAD Rig Name No: GWS 1/1, MILES-GRAY 1/1 **Event: COMPLETION** Start Date: 8/23/2009 End Date: 9/25/2009 Active Datum: RKB @4,887.00ft (above Mean Sea UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,442.00/E/0/2,580.00/0/0 Level) Date Duration Phase Code Sub PAJ MD From Operation Start-End (hr) Code 7:15 - 10:00 2.75 COMP 31 TIH W/ 2 3/8" TBG, TAG CBP @ 8154', R/U POWER SWIVEL, EST. CIRC DN TBG OUT CSG. 10:00 - 17:30 7.50 COMP 44 C Р (DRLG CBP #1) 8154', DRILL OUT HALLIBURTON 8K CBP IN 5 MIN, 200 # DIFF., RIH TAG @ 8308', C/O 20 ' SAND, FCP = 250 #. (DRLG CBP #2) 8328', DRILL OUT HALLIBURTON 8K CBP IN 5 MIN, 0 # DIFF, RIH TAG @ 8554', C/O 30 'SAND, FCP = 250 #. (DRLG CBP #3) 8584', DRILL OUT HALLIBURTON 8K CBP IN 3 MIN, 50 # DIFF, RIH TAG @ 8824 ', C/O 40 'SAND, FCP = 300 #. (DRLG CBP #4) 8864', DRILL OUT HALLIBURTON 8K CBP IN 3 MIN, 0 # DIFF, RIH TAG @ 9258 ', C/O 30 ' SAND, FCP = 300 #. (DRLG CBP #5) 9288', DRILL OUT HALLIBURTON 8K CBP IN 5 MIN, 50 # DIFF, RIH TAG @ 9644', C/O 40 'SAND, FCP = 350 #. (DRLG CBP #6) 9684', DRILL OUT HALLIBURTON 8K CBP IN 5 MIN, 50 # DIFF, RIH TAG @ 9924 ', C/O 60 ' SAND, TO PBTD 9984', FCP = 400 #. CIRC WELL CLEAN, R/D POWER SWIVEL, POOH LAY DN 18 JTS ON TRAILER, LAND TBG ON HANGER W/ 298 JTS 2 3/8" L-80 TBG, EOT @ 9450.05', R/D FLOOR & TBG EQUIP, N/D BOP N/U WH, DROP BALL DN TBG, PUMP OFF THE BIT @ 2800 #, WAIT 30 MIN FOR BIT TO FALL TO BTM. OPEN WELL UP TO FBT ON 48/64 CHOKE, FTP = 450 #, SICP = 1750 #, TURN WELL OVER TO FBC @ 4:30 PM, W/ 7,495 BBLS WTR LTR. AVG. 4 MIN / PLUG W / 220' SAND TOTAL, AVG 36' / PLUG, 323 JTS DELV. 298 JTS LANDED, RETURNED. ΚB 26.00' **HANGER** .83' 298 JTS 2 3/8" L-80 TBG 9421.02 FAST EDDIE XN-NIPPLE 1.875 PROFILE 2.201 EOT 9450.05' R/D SERVICE UNIT AND MOVE OVER TO NBU 922-18J3S. 9/26/2009 7:00 33 Α 7 AM FLBK REPORT: CP 1775#, TP 1800#, 20/64" CK, 63 BWPH, LIGHT SAND, LIGHT GAS TTL BBLS RECOVERED: 4945 BBLS LEFT TO RECOVER: 6390

### **Operation Summary Report**

 Well: NBU 922-18/3S (YELLOW)
 Spud Conductor: 12/16/2008
 Spud Date: 2/23/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18J PAD
 Rig Name No: GWS 1/1, MILES-GRAY 1/1

 Event: COMPLETION
 Start Date: 8/23/2009
 End Date: 9/25/2009

 Active Datum: RKB @4,887.00ft (above Mean Sea
 UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,442.00/E/0/2,580.00/0/0

Active Datum: RKB @4,887.00ft (above Mean Sea Level)

| _evei)    |                           |                        | l   |                 |   |
|-----------|---------------------------|------------------------|-----|-----------------|---|
| Date      | Time<br>Start- <b>End</b> | Duration Phase<br>(hr) | 1 1 | Sub P/U<br>Code | MD From Operation (ft)  |
| 9/27/2009 | 7:00 -                    | Section 1              | 33  | Α               | 7 AM FLBK REPORT: CP 1900#, TP 2000#, 20/64"<br>CK. 50 BWPH, LIGHT SAND, LIGHT GAS                |
|           |                           |                        |     |                 | TTL BBLS RECOVERED: 6311 BBLS LEFT TO RECOVER: 5024   |
| 9/28/2009 | 7:00 -                    |                        | 33  | Α               | 7 AM FLBK REPORT: CP 2500#, TP 2000#, 20/64"<br>CK, 38 BWPH, LIGHT SAND, LIGHT GAS                |
|           |                           |                        |     |                 | TTL BBLS RECOVERED: 7349 BBLS LEFT TO RECOVER: 3986   |
|           | 9:00 -                    | PROD                   | 50  |                 | WELL TURNED TO SALE @ 0900 HR ON 9/28/09 -<br>FTP 1900#, CP 2750#, 1.6 MCFD, 38 BWPD, 20/64<br>CK |
| 9/29/2009 | 7:00 -                    |                        | 33  | Α               | 7 AM FLBK REPORT: CP 3125#, TP 2000#, 20/64"  |

CK, 31 BWPH, TRACE SAND, 2077 GAS

TTL BBLS RECOVERED: 8181 BBLS LEFT TO RECOVER: 3154 Form 3160-4 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

### WELL COMPLETION OR RECOMPLETION REPORT AND LOG

|                        | WELL (   | COMPL                    | ETION C                                | R RECO                   | MPLET                                  | ION R             | EPORT             | AND L                | .OG                  |                                       |  | ase Serial N<br>TU461         | lo.            | ,   |
|------------------------|--|--------------------------|--|--------------------------|--|-------------------|-------------------|----------------------|----------------------|---------------------------------------|--|-------------------------------|----------------|---|
| la. Type of            | _  | Oil Well                 | 🛭 Gas                                  | Well 🔲                   |  | Other             | *****             |                      |                      |                                       | 6. If  | Indian, Allo                  | ttee or        | Tribe Name  |
| b. Type of             | f Completion                                     | Othe                     | ew Well<br>r                           | ☐ Work O                 | ver 🔲                                  | Deepen            | ☐ Pluş            | g Back               | ☐ Diff. R            | lesvr.                                | 7. Ur<br>8!                                  | nit or CA A;<br>91008900      | greeme         | nt Name and No.   |
| 2. Name of KERR-       | Operator<br>MCGEE OII                            | _&GAS O                  | NSHOREE                                | LMail: andre             | Contact:                               | ANDY L            | YTLE<br>com       | ***                  |                      |                                       |  | ase Name a                    |                | l No.   |
|                        | P.O. BOX<br>DENVER                               | 173779                   |  |                          | ,                                      | 3a.               |                   |                      | area code)           | )                                     |  | PI Well No.                   |                | 43-047-39844  |
| 4. Location            | of Well (Re                                      | port location            | on clearly ar                          | nd in accorda            | nce with F                             | ederal rec        | uirements         | )*                   |                      |                                       | 10. F  | ield and Po                   | ol, or E       | xploratory  |
| At surfa               |  |                          |  | 40.03274 N               | ,                                      | 48184 V           | / Lon             |                      |                      |                                       | 11. S  | ec., T., R.,                  | M., or I       | Block and Survey<br>S R22E Mer                              |
| At top p  At total     | orod interval i                                  | •                        | ow SES<br>SL 718FEL                    |                          |  |                   | <b>-</b>          | <b>^</b>             | . )                  |                                       | 12. C  | County or Pa                  |                | 13. State   |
| 14. Date Sr<br>12/16/2 | oudded   | JE 10041                 | 15. D                                  | ate T.D. Rea<br>/21/2009 |  | r Hs              | 16. Date          | Complete<br>A 8/2009 | ed<br>Ready to P     | rod.                                  |  | INTAH<br>Elevations (I<br>486 | OF, KB<br>1 GL | UT<br>, RT, GL)*  |
| 18. Total D            | Pepth:   | MD<br>TVD                | 10019<br>9659                          | 9 19.                    | Plug Back                              | T.D.:             | MD<br>TVD         | 998                  |                      | 20. Dep                               | th Bric                                      | ige Plug Se                   |                | AD<br>VD  |
| 21. Type E             | lectric & Oth                                    | er Mechar                | ical Logs R                            | un (Submit o<br>COMBO    | opy of eac                             | h)                |                   | 90                   | 22. Was v            | well cored<br>DST run?<br>tional Sur  | -  | 🛛 No 🏻 [                      | Yes            | (Submit analysis)<br>(Submit analysis)<br>(Submit analysis) |
| 23. Casing ar          | nd Liner Reco                                    | ord (Repo                | rt all strings                         | set in well)             |  |                   |                   |                      |                      |                                       |  |                               |                |   |
| Hole Size              | Size/G   | rade                     | Wt. (#/ft.)                            | Top<br>(MD)              | Bottom<br>(MD)                         | _                 | Cementer<br>Depth |                      | f Sks. &<br>f Cement | Slurry<br>(BB                         |  | Cement T                      | op*            | Amount Pulled   |
| 20.000                 | <del>                                     </del> | STEEL                    | 36.7                                   |                          |  | 40                |                   |                      | 28                   |                                       |  |                               |                |   |
| 12.250<br>7.875        |  | 525 J-55<br>500 I-80     | 36.0<br>11.6                           |                          | 27<br>100                              |                   |                   |                      | 680<br>1935          |                                       |  |                               | -              |   |
|                        |  |                          |  |                          |  |                   |                   | 4.7                  |                      |                                       |  |                               |                |   |
| <b></b>                |  |                          |  |                          | ļ                                      |                   |                   |                      |                      | ļ                                     |  |                               | [              |   |
| 24. Tubing             | Record   |                          | <del></del>                            | <u> </u>                 | <u> </u>                               |                   |                   | <u></u>              |                      | 1                                     | !  |                               | <u> </u>       |   |
| Size                   | Depth Set (M                                     | (D) Pa                   | cker Depth                             | (MD) S                   | ize De                                 | pth Set (1        | MD) F             | acker Dep            | th (MD)              | Size                                  | De   | pth Set (MI                   | ) F            | acker Depth (MD)  |
| 2.375<br>25. Producis  |  | 9450                     | ······································ | İ                        |  | 6 Perfor          | ation Reco        | ard.                 |                      |                                       | <u>.                                    </u> |                               |                |   |
|                        | ormation   |                          | Тор                                    | Во                       | ottom                                  | -                 | erforated         |                      |                      | Size                                  | l N  | lo. Holes                     |                | Perf. Status  |
| A)                     | MESAVE   | RDE                      |  | 8204                     | 9970                                   |                   |                   | 8204 T               | O 9970               | 0.3                                   |  |                               | OPEN           |   |
|                        | SMVD   |                          |  |                          |  |                   |                   |                      |                      |                                       |  |                               |                |   |
| C)<br>D)               |  |                          | ·····                                  |                          |  |                   |                   |                      | <u>-</u>             | <del></del>                           |  |                               |                |   |
|                        | racture, Treat                                   | ment, Cen                | ent Squeeze                            | e, Etc.                  |  |                   |                   |                      |                      |                                       |  |                               |                |   |
| ]                      | Depth Interve                                    |                          |  |                          |  |                   |                   |                      | Type of M            | laterial                              |  |                               |                |   |
|                        | 82   | .04 TO 99                | 70 PMP 11                              | ,115 BBLS S              | LICK H20 8                             | 435,639           | LBS 30/50         | SD.                  |                      | · · · · · · · · · · · · · · · · · · · |  | <del> </del>                  |                |   |
|                        |  |                          |  |                          | ······································ |                   |                   |                      |                      |                                       |  |                               |                | ·   |
|                        |  |                          |  |                          |  |                   |                   |                      |                      |                                       |  |                               |                |   |
| 28. Producti           | ion - Interval<br>Test                           | A<br>Hours               | Test                                   | Oil                      | Gas                                    | Water             | Oil G             | rozrita:             | Gas                  |                                       | Duo des sel                                  | on Method                     | ·              |   |
| Produced<br>09/28/2009 | Date<br>10/22/2009                               | Tested<br>24             | Production                             | BBL<br>0.0               | MCF<br>2629.0                          | BBL 0.0           | Corr.             |                      | Gravity              | ,                                     | Froduction                                   |                               | S FROI         | M WELL  |
| Choke<br>Size<br>20/64 | Tbg. Press.<br>Flwg. 1072<br>SI                  | Csg.<br>Press.<br>1597.0 | 24 Hr.<br>Rate                         | Oil<br>BBL<br>0          | Gas<br>MCF<br>2629                     | Water<br>BBL<br>0 | Gas:C<br>Ratio    | il                   | Well St              | tatus<br>PGW                          |  |                               |                |   |
|                        | tion - Interva                                   | L                        |  | L                        | 2020                                   | <u></u>           |                   |                      |                      | 344                                   | ··. ·  | <del>- h</del>                | En             | En.   |
| Date First<br>Produced | Test<br>Date                                     | Hours<br>Tested          | Test<br>Production                     | Oil<br>BBL               | Gas<br>MCF                             | Water<br>BBL      | Oil Gi<br>Corr.   |                      | Gas<br>Gravity       | ,                                     | Production                                   | on Method                     | OV n           | EIVED<br>19 2009  |
| Choke<br>Size          | Tbg. Press.<br>Flwg.<br>SI                       | Csg.<br>Press.           | 24 Hr.<br>Rate                         | Oit<br>BBL               | Gas<br>MCF                             | Water<br>BBL      | Gas:C<br>Ratio    | il                   | Well St              | tatus                                 |  | DIV. OF                       | DIL, GA        | S & 400   |
| (See Instructi         | ions and space                                   | es for add               | itional data                           | On reverse s             | ida)                                   | <u> </u>          |                   |                      |                      |                                       |  |                               |                | W PHINING   |

|                                       |   |                             | •                             |                                |                                       |  |                               |               |             |                                  |                    |
|---------------------------------------|---|-----------------------------|-------------------------------|--------------------------------|---------------------------------------|--|-------------------------------|---------------|-------------|----------------------------------|--------------------|
|                                       | luction - Interv                                      |                             | <del></del>                   |                                | T                                     | ·  |                               |               |             |                                  |                    |
| Date First<br>Produced                | Test<br>Date  | Hours<br>Tested             | Test<br>Production            | Oil<br>BBL                     | Gas<br>MCF                            | Water<br>BBL                                     | Oil Gravity<br>Corr. API      | Gas<br>Grav   | rity        | Production Method                |                    |
| Choke<br>Size                         | Tbg. Press.<br>Flwg.<br>SI                            | Csg.<br>Press.              | 24 Hr.<br>Rate                | Oil<br>BBL                     | Gas<br>MCF                            |  | Gas:Oil<br>Ratio              | Weil          | Status      |                                  |                    |
| 28c. Prod                             | luction - Interv                                      | al D                        | <u> </u>                      | <u> </u>                       | ·                                     |  |                               | -             | <del></del> |                                  |                    |
| Date First<br>Produced                | Test<br>Date  | Hours<br>Tested             | Test<br>Production            | Oil<br>BBL                     | Gas<br>MCF                            | Water<br>BBL                                     | Oil Gravity<br>Corr. API      | Gas<br>Grav   | ity         | Production Method                |                    |
| Choke<br>Size                         | Tbg. Press.<br>Flwg.<br>SI                            | Csg.<br>Press.              | 24 Hr.<br>Rate                | Oil<br>BBL                     | Gas<br>MCF                            | Water<br>BBL                                     | Gas:Oil<br>Ratio              | Well          | Status      |                                  |                    |
| 29. Dispo                             | osition of Gas <i>(S</i><br>D                         | Sold, used j                | for fuel, vent                | ed, etc.)                      | · · · · · · · · · · · · · · · · · · · |  |                               | •             |             | A                                |                    |
| 30. Sumr                              | nary of Porous  | Zones (Inc                  | clude Aquife                  | rs):                           |                                       |  |                               |               | 31. For     | mation (Log) Markers             |                    |
| tests,                                | all important : including dept ecoveries.             | zones of po<br>h interval t | orosity and contested, cushic | ontents there<br>on used, time | e of: Cored is<br>tool open,          | ntervals and all<br>flowing and sh               | drill-stem<br>nut-in pressure | s             |             |                                  |                    |
|                                       | Formation   |                             | Тор                           | Bottom                         |                                       | Descriptions                                     | , Contents, etc               |               | i           | Name                             | Top<br>Meas. Depth |
| GREEN F<br>MAHOGA<br>WASATO<br>MESAVE | ANY<br>:H   |                             | 1728<br>2340<br>5292<br>7960  | 7858<br>9987                   |                                       |  |                               |               |             |                                  |                    |
| 32. Addit                             | tional remarks  | (include pl                 | ugging proc                   | edure):                        |                                       |  |                               |               |             |                                  |                    |
| ATT/<br>REP                           | ACHED TO TO<br>ORT (DIREC                             | HIS COM                     | PLETIÓN F<br>SURVEY).         | EPORT IS                       | THE CHR                               | RONOLOGICA                                       | AL WELL HIS                   | TORY AI       | ND END      | OF WELL                          |                    |
| 1. El                                 | e enclosed attac<br>ectrical/Mecha<br>andry Notice fo | nical Logs                  | •                             | • /                            |                                       | Geologic R     Core Analy                        |                               |               | . DST Rep   | port 4. Directi                  | onal Survey        |
| 34. I here                            | by certify that                                       | the forego                  | Elect                         | ronic Subm                     | ission #767                           | plete and corre<br>774 Verified by<br>DIL&GAS ON | v the BLM W                   | ell Inforn    | nation Sys  | e records (see attached instruct | tions):            |
| Name                                  | e (please print)                                      | ANDY LY                     | /TLE                          |                                |                                       |  | Title <u>R</u>                | EGULAT        | ORY AN      | ALYST                            |                    |
| Signa                                 | uture   | (Electron                   | ic Submissi                   | 60=                            |                                       |  | Date <u>1</u>                 | 1/03/2009     | 9           |                                  |                    |
| Title 18 U                            | J.S.C. Section  | 1001 and T                  | Title 43 U.S.                 | C. Section 1                   | 212, make i                           | it a crime for ar                                | ıy person knov                | vingly and    | l willfully | to make to any department or     | agency             |
| of the Un                             | ited States any                                       | talse, ficti                | tious or frad                 | ulent statem                   | ents or repr                          | esentations as t                                 | o any matter w                | vithin its ji | urisdiction | 1,                               | - <del>-</del>     |



## ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27) NBU 922-18 PAD IJNOP NBU 922-1813S

1

Survey: FINAL

## **Standard Survey Report**

22 June, 2009







### NBU 922-1813S UINTAH COUNTY, UTAH (nad 27) SECTION 18 T9S R22E LAT: 40° 1' 58.140 N LONG: 109° 28' 54.090 W RIG: HP 298



1750

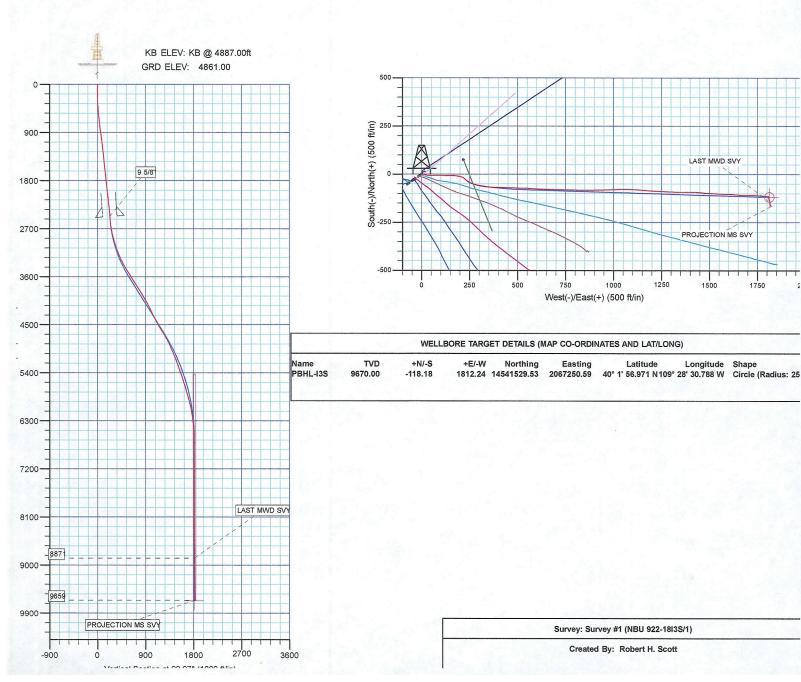
WELL DETAILS: NBU 922-1813S 4861.00 Ground Level: +N/-S +E/-W Northing Easting Longitude Slot 14541616.80 2065436.60 40° 1' 58.140 N 0.00 0.00 109° 28' 54.090 W

|          |       |        |         | SECTION | DETAILS |      |        |         |          |
|----------|-------|--------|---------|---------|---------|------|--------|---------|----------|
| MD       | Inc   | Azi    | TVD     | +N/-S   | +E/-W   | DLeg | TFace  | VSec    | Target   |
| 2397.00  | 5.56  | 133.00 | 2384.30 | -24.18  | 224.88  | 0.00 | 0.00   | 225.97  |          |
| 2552.00  | 5.56  | 133.00 | 2538.57 | -34.42  | 235.86  | 0.00 | 0.00   | 237.60  |          |
| 3673.34  | 32.00 | 91.71  | 3593.22 | -81.29  | 579.41  | 2.50 | -48.06 | 583.48  |          |
| 4905.95  | 32.00 | 91.71  | 4638.59 | -100.83 | 1232.23 | 0.00 | 0.00   | 1236.18 |          |
| 7039.01  | 0.00  | 0.00   | 6662.50 | -118.18 | 1812.24 | 1.50 | 180.00 | 1816.09 |          |
| 10046.51 | 0.00  | 0.00   | 9670.00 | -118.18 | 1812.24 | 0.00 | 0.00   | 1816.09 | PBHL-I3S |

#### FORMATION TOP DETAILS

TVDPath MDPath 4938.00 5249.80 7592.00 7968.51 Formation WASATCH MESAVERDE

|         | CASING DE | IAILS  |      |
|---------|-----------|--------|------|
| TVD     | MD        | Name   | Size |
| 2472.59 | 2485.70   | 9 5/8" | 9.62 |







### Weatherford International Lt

Survey Report



Company:

ANADARKO PETROLEUM CORP.

Project:

UINTAH COUNTY, UTAH (nad 27)

Site:

NBU 922-18 PAD IJNOP

Well:

NBU 922-18I3S

Wellbore: Design:

Local Co-ordinate Reference:

TVD Reference:

**MD Reference:** 

North Reference:

**Survey Calculation Method:** 

Database:

Well NBU 922-1813S

KB @ 4887.00ft

KB @ 4887.00ft

True

Minimum Curvature

Mean Sea Level

EDM 2003.21 Single User Db

Project

UINTAH COUNTY, UTAH (nad 27),

Map System: Geo Datum:

Universal Transverse Mercator (US Survey Fee System Datum:

NAD 1927 - Western US

Zone 12N (114 W to 108 W)

Map Zone:

Site Position:

NBU 922-18 PAD IJNOP

From:

Site

Lat/Long

Northing: Easting:

14,541,563.95ft 2,065,363.48ft

Latitude:

Longitude:

40° 1' 57.630 N

**Position Uncertainty:** 

0.00 ft

Slot Radius:

0.00 in

**Grid Convergence:** 

109° 28' 55.042 W

0.98°

Well

**Position Uncertainty** 

NBU 922-1813S, 1442 FSL, 2580 FEL - SEC18 T9S R22E

**Well Position** +N/-S

+E/-W

0.00 ft 0.00 ft

0.00 ft

Northing: Easting:

Wellhead Elevation:

14,541,616.80 ft

2,065,436.60 ft

Latitude: Longitude: 40° 1' 58.140 N

109° 28' 54.090 W **Ground Level:** 

4,861.00 ft

Wellbore

**Magnetics** 

**Model Name** 

Sample Date

Declination (°)

Dip Angle (°)

**Field Strength** 

(nT)

**BGGM2008** 

5/5/2009

11.37

65.98

52,575

Design

1

**Audit Notes:** 

Version: 1.0

135.00

Phase:

0.00

ACTUAL

Tie On Depth:

0.00

**Vertical Section:** 

Depth From (TVD) (ft)

+N/-S (ft) 0.00

+E/-W (ft) 0.00

Direction (°)

92.97

Survey Program

Date 6/22/2009

From (ft)

То

(ft)

Survey (Wellbore)

10,019.00 Survey #1 (1)

**Tool Name** 

MWD

Description

MWD - Standard

Survey

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 0.00                      | 0.00               | 0.00           | 0.00                      | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 135.00                    | 0.06               | 325.88         | 135.00                    | 0.06          | -0.04         | -0.04                       | 0.04                        | 0.04                       | 0.00                      |
| 196.00                    | 0.68               | 127.30         | 196.00                    | -0.13         | 0.23          | 0.24                        | 1.21                        | 1.02                       | 264.62                    |
| 257.00                    | 1.52               | 101.69         | 256.99                    | -0.52         | 1.31          | 1.34                        | 1.56                        | 1.38                       | -41.98                    |
| 319.00                    | 2.44               | 75.62          | 318.95                    | -0.36         | 3.39          | 3.41                        | 2.04                        | 1.48                       | -42.05                    |
| 379.00                    | 3.38               | 92.62          | 378.87                    | -0.12         | 6.40          | 6.40                        | 2.11                        | 1.57                       | 28.33                     |
| 471.00                    | 4.88               | 103.37         | 470.63                    | -1.15         | 12.92         | 12.96                       | 1.83                        | 1.63                       | 11.68                     |
| 565.00                    | 5.69               | 107.50         | 564.23                    | -3.47         | 21.25         | 21.40                       | 0.95                        | 0.86                       | 4.39                      |
| 658.00                    | 6.00               | 97.37          | 656.75                    | -5.48         | 30.47         | 30.71                       | 1.16                        | 0.33                       | -10.89                    |
| 751.00                    | 6.56               | 90.25          | 749.20                    | -6.13         | 40.60         | 40.86                       | 1.03                        | 0.60                       | -7.66                     |
| 845.00                    | 7.06               | 89.50          | 842.53                    | -6.10         | 51.75         | 51.99                       | 0.54                        | 0.53                       | -0.80                     |
| 938.00                    | 7.19               | 89.62          | 934.81                    | -6.01         | 63.28         | 63.51                       | 0.14                        | 0.14                       | 0.13                      |
| 1,031.00                  | 7.94               | 87.87          | 1.027.00                  | -5.73         | 75.52         | 75.72                       | 0.84                        | 0.81                       | -1.88                     |





# Weatherford International Lt

Survey Report



Company: Project: ANADARKO PETROLEUM CORP. UINTAH COUNTY, UTAH (nad 27)

Site:

NBU 922-18 PAD IJNOP

Well: Wellbore: NBU 922-18I3S

Design: 1

**Local Co-ordinate Reference:** 

TVD Reference:
MD Reference:

North Reference:

**Survey Calculation Method:** 

Database:

Well NBU 922-1813S

KB @ 4887.00ft KB @ 4887.00ft

True

Minimum Curvature

EDM 2003.21 Single User Db

## Survey

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100 <del>ft</del> ) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|--|
| 1,124.00                  | 7.06               | 86.87          | 1,119.21                  | -5.18         | 87.65         | 87.80                       | 0.96                        | -0.95                      | -1.08                                  |
| 1,216.00                  | 6.94               | 92.12          | 1,210.52                  | -5.08         | 98.85         | 98.98                       | 0.71                        | -0.13                      | 5.71                                   |
| 1,310.00                  | 6.88               | 94.37          | 1,303.84                  | -5.72         | 110.13        | 110.28                      | 0.29                        | -0.06                      | 2.39                                   |
| 1,402.00                  | 5.63               | 93.37          | 1,395.29                  | -6.40         | 120.13        | 120.30                      | 1.36                        | -1.36                      | -1.09                                  |
| 1,494.00                  | 5.56               | 91.50          | 1,486.85                  | -6.78         | 129.09        | 129.27                      | 0.21                        | -0.08                      | -2.03                                  |
| 1,587.00                  | 5.80               | 91.06          | 1,579.40                  | -6.99         | 138.30        | 138.47                      | 0.26                        | 0.26                       | -0.47                                  |
| 1,680.00                  | 5.69               | 90.37          | 1,671.93                  | -7.10         | 147.61        | 147.78                      | 0.14                        | -0.12                      | -0.74                                  |
| 1,772.00                  | 6.25               | 88.62          | 1,763.43                  | -7.01         | 157.17        | 157.32                      | 0.64                        | 0.61                       | -1.90                                  |
| 1,865.00                  | 6.31               | 91.50          | 1,855.87                  | -7.02         | 167.34        | 167.48                      | 0.34                        | 0.06                       | 3.10                                   |
| 1,958.00                  | 6.44               | 95.75          | 1,948.30                  | -7.68         | 177.64        | 177.80                      | 0.53                        | 0.14                       | 4.57                                   |
| 2,053.00                  | 6.44               | 98.62          | 2,042.70                  | -9.01         | 188.21        | 188.42                      | 0.34                        | 0.00                       | 3.02                                   |
| 2,146.00                  | 7.03               | 103.05         | 2,135.06                  | -11.08        | 198.91        | 199.22                      | 0.84                        | 0.63                       | 4.76                                   |
| 2,239.00                  | 7.25               | 109.75         | 2,227.34                  | -14.35        | 209.98        | 210.44                      | 0.93                        | 0.24                       | 7.20                                   |
| 2,334.00                  | 6.50               | 129.00         | 2,321.67                  | -19.76        | 219.80        | 220.53                      | 2.54                        | -0.79                      | 20.26                                  |
| 2,365.00                  | 6.25               | 131.25         | 2,352.47                  | -21.97        | 222.43        | 223.27                      | 1.14                        | -0.81                      | 7.26                                   |
| 2,397.00                  | 5.56               | 133.00         | 2,384.30                  | -24.18        | 224.88        | 225.83                      | 2.23                        | -2.16                      | 5.47                                   |
| 2,561.00                  | 5.45               | 124.68         | 2,547.55                  | -34.03        | 237.09        | 238.54                      | 0.49                        | -0.07                      | -5.07                                  |
| 2,660.00                  | 8.81               | 119.61         | 2,645.77                  | -40.45        | 247.55        | 249.31                      | 3.45                        | 3.39                       | -5.12                                  |
| 2,755.00                  | 11.57              | 111.89         | 2,739.27                  | -47.60        | 262.72        | 264.83                      | 3.24                        | 2.91                       | -8.13                                  |
| 2,850.00                  | 14.39              | 107.24         | 2,831.83                  | -54.65        | 282.84        | 285.29                      | 3.16                        | 2.97                       | -4.89                                  |
| 2,944.00                  | 15.77              | 100.97         | 2,922.60                  | -60.54        | 306.54        | 309.26                      | 2.27                        | 1.47                       | -6.67                                  |
| 3,039.00                  | 18.18              | 95.64          | 3,013.46                  | -64.46        | 333.97        | 336.85                      | 3.02                        | 2.54                       | -5.61                                  |
| 3,134.00                  | 20.51              | 93.71          | 3,103.09                  | -66.99        | 365.33        | 368.30                      | 2.54                        | 2.45                       | -2.03                                  |
| 3,229.00                  | 22.18              | 90.28          | 3,191.58                  | -68.16        | 399.87        | 402.86                      | 2.19                        | 1.76                       | -3.61                                  |
| 3,324.00                  | 24.98              | 92.33          | 3,278.64                  | -69.06        | 437.85        | 440.84                      | 3.07                        | 2.95                       | 2.16                                   |
| 3,418.00                  | 28.81              | 92.10          | 3,362.45                  | -70.70        | 480.34        | 483.35                      | 4.08                        | 4.07                       | -0.24                                  |
| 3,513.00                  | 31.25              | 91.10          | 3,444.69                  | -72.01        | 527.85        | 530.87                      | 2.62                        | 2.57                       | -1.05                                  |
| 3,608.00                  | 33.06              | 94.23          | 3,525.13                  | -74.39        | 578.34        | 581.42                      | 2.59                        | 1.91                       | 3.29                                   |
| 3,702.00                  | 31.88              | 92.22          | 3,604.43                  | -77.25        | 628.72        | 631.87                      | 1.70                        | -1.26                      | -2.14                                  |
| 3,797.00                  | 32.56              | 90.73          | 3,684.80                  | -78.54        | 679.35        | 682.50                      | 1.10                        | 0.72                       | -1.57                                  |
| 3,892.00                  | 31.56              | 92.60          | 3,765.32                  | -80.00        | 729.75        | 732.91                      | 1.48                        | -1.05                      | 1.97                                   |
| 3,987.00                  | 32.56              | 91.10          | 3,845.83                  | -81.62        | 780.15        | 783.32                      | 1.35                        | 1.05                       | -1.58                                  |
| 4,082.00                  | 31.63              | 90.48          | 3,926.31                  | -82.32        | 830.61        | 833.76                      | 1.04                        | -0.98                      | -0.65                                  |
| 4,177.00                  | 29.06              | 88.85          | 4,008.29                  | -82.06        | 878.60        | 881.67                      | 2.84                        | -2.71                      | -1.72                                  |
| 4,271.00                  | 29.56              | 88.98          | 4,090.25                  | -81.19        | 924.61        | 927.57                      | 0.54                        | 0.53                       | 0.14                                   |
| 4,366.00                  | 26.50              | 88.98          | 4,174.10                  | -80.40        | 969.24        | 972.10                      | 3.22                        | -3.22                      | 0.00                                   |
| 4,461.00                  | 25.75              | 87.23          | 4,259.40                  | -79.02        | 1,011.04      | 1,013.78                    | 1.13                        | -0.79                      | -1.84                                  |
| 4,556.00                  | 27.00              | 89.23          | 4,344.51                  | -77.73        | 1,053.22      | 1,055.83                    | 1.61                        | 1.32                       | 2.11                                   |
| 4,651.00                  | 28.56              | 93.60          | 4,428.56                  | -78.87        | 1,097.46      | 1,100.07                    | 2.70                        | 1.64                       | 4.60                                   |
| 4,745.00                  | 28.81              | 93.60          | 4,511.03                  | -81.70        | 1,142.49      | 1,145.18                    | 0.27                        | 0.27                       | 0.00                                   |
| 4,840.00                  | 31.38              | 94.35          | 4,593.21                  | -85.02        | 1,190.00      | 1,192.81                    | 2.73                        | 2.71                       | 0.79                                   |
| 4,935.00                  | 31.94              | 93.10          | 4,674.08                  | -88.25        | 1,239.76      | 1,242.66                    | 0.91                        | 0.59                       | -1.32                                  |
| 5,029.00                  | 29.00              | 92.10          | 4,755.09                  | -90.43        | 1,287.37      | 1,290.32                    | 3.17                        | -3.13                      | -1.06                                  |
| 5,123.00                  | 26.50              | 90.73          | 4,838.27                  | -91.53        | 1,331.11      | 1,334.07                    | 2.74                        | -2.66                      | -1.46                                  |
| 5,218.00                  | 23.75              | 90.35          | 4,924.27                  | -91.92        | 1,371.45      | 1,374.36                    | 2.90                        | -2.89                      | -0.40                                  |
| 5,312.00                  | 22.56              | 89.98          | 5,010.70                  | -92.03        | 1,408.41      | 1,411.28                    | 1.28                        | -1.27                      | -0.39                                  |
| 5,407.00                  | 22.31              | 94.98          | 5,098.52                  | -93.59        | 1,444.60      | 1,447.51                    | 2.03                        | -0.26                      | 5.26                                   |
| 5,502.00                  | 20.50              | 95.48          | 5,186.96                  | -96.74        | 1,479.12      | 1,482.15                    | 1.91                        | -1.91                      | 0.53                                   |
| 5,597.00                  | 19.31              | 92.35          | 5,276.29                  | -98.98        | 1,511.38      | 1,514.48                    | 1.68                        | -1.25                      | -3.29                                  |
| 5,692.00                  | 18.94              | 92.73          | 5,366.04                  | -100.36       | 1,542.47      | 1,545.60                    | 0.41                        | -0.39                      | 0.40                                   |
| 5,787.00                  | 17.94              | 92.48          | 5,456.16                  | -101.72       | 1,572.49      | 1,575.65                    | 1.06                        | -1.05                      | -0.26                                  |
| 5,882.00                  | 18.63              | 91.35          | 5,546.37                  | -102.71       | 1,602.28      | 1,605.45                    | 0.82                        | 0.73                       | -1.19                                  |
| 5,976.00                  | 16.88              | 94.98          | 5,635.89                  | -104.25       | 1,630.89      | 1,634.10                    | 2.20                        | -1.86                      | 3.86                                   |
| 6,071.00                  | 15.69              | 97.66          | 5,727.08                  | -107.16       | 1,657.36      | 1,660.68                    | 1.48                        | -1.25                      | 2.82                                   |





# Weatherford International Lt

Survey Report



Company:

ANADARKO PETROLEUM CORP. UINTAH COUNTY, UTAH (nad 27)

Project: Site:

NBU 922-18 PAD IJNOP

Well: Wellbore: NBU 922-18I3S

Design:

1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well NBU 922-1813S

KB @ 4887.00ft KB @ 4887.00ft

True

Minimum Curvature

EDM 2003.21 Single User Db

# Survey

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 6,166.00                  | 16.38              | 88.85          | 5,818.39                  | -108.61       | 1,683.49      | 1,686.85                    | 2.66                        | 0.73                       | -9.27                     |
| 6,260.00                  | 15.69              | 88.73          | 5,908.74                  | -108.06       | 1,709.45      | 1,712.75                    | 0.73                        | -0.73                      | -0.13                     |
| 6,355.00                  | 12.75              | 94.48          | 6,000.82                  | -108.59       | 1,732.75      | 1,736.04                    | 3.43                        | -3.09                      | 6.05                      |
| 6,449.00                  | 11.31              | 93.60          | 6,092.75                  | -109.98       | 1,752.29      | 1,755.63                    | 1.54                        | -1.53                      | -0.94                     |
| 6,543.00                  | 9.00               | 94.10          | 6,185.27                  | -111.09       | 1,768.82      | 1,772.20                    | 2.46                        | -2.46                      | 0.53                      |
| 6,638.00                  | 7.00               | 95.48          | 6,279.34                  | -112.17       | 1,782.00      | 1,785.42                    | 2.11                        | -2.11                      | 1.45                      |
| 6,732.00                  | 5.19               | 96.98          | 6,372.81                  | -113.23       | 1,791.92      | 1,795.38                    | 1.93                        | -1.93                      | 1.60                      |
| 6,826.00                  | 3.75               | 88.47          | 6,466.52                  | -113.67       | 1,799.21      | 1,802.69                    | 1.68                        | -1.53                      | -9.05                     |
| 6,921.00                  | 1.44               | 83.73          | 6,561.42                  | -113.45       | 1,803.51      | 1,806.96                    | 2.44                        | -2.43                      | -4.99                     |
| 7,016.00                  | 1.31               | 82.73          | 6,656.39                  | -113.19       | 1,805.77      | 1,809.21                    | 0.14                        | -0.14                      | -1.05                     |
| 7,109.00                  | 0.44               | 123.35         | 6,749.38                  | -113.25       | 1,807.12      | 1,810.56                    | 1.09                        | -0.94                      | 43.68                     |
| 7,204.00                  | 0.46               | 159.22         | 6,844.38                  | -113.81       | 1,807.56      | 1,811.03                    | 0.29                        | 0.02                       | 37.76                     |
| 7,298.00                  | 0.38               | 167.48         | 6,938.37                  | -114.46       | 1,807.76      | 1,811.27                    | 0.11                        | -0.09                      | 8.79                      |
| 7,393.00                  | 0.56               | 184.60         | 7,033.37                  | -115.23       | 1,807.80      | 1,811.34                    | 0.24                        | 0.19                       | 18.02                     |
| 7,488.00                  | 0.63               | 196.48         | 7,128.37                  | -116.20       | 1,807.61      | 1,811.20                    | 0.15                        | 0.07                       | 12.51                     |
| 7,582.00                  | 0.81               | 177.98         | 7,222.36                  | -117.36       | 1,807.49      | 1,811.14                    | 0.31                        | 0.19                       | -19.68                    |
| 7,677.00                  | 0.75               | 172.73         | 7,317.35                  | -118.64       | 1,807.59      | 1,811.31                    | 0.10                        | -0.06                      | -5.53                     |
| 7,771.00                  | 0.75               | 189.23         | 7,411.34                  | -119.86       | 1,807.57      | 1,811.35                    | 0.23                        | 0.00                       | 17.55                     |
| 7,865.00                  | 1.00               | 196.35         | 7,505.33                  | -121.26       | 1,807.24      | 1,811.09                    | 0.29                        | 0.27                       | 7.57                      |
| 7,960.00                  | 0.13               | 141.35         | 7,600.33                  | -122.14       | 1,807.07      | 1.810.97                    | 0.98                        | -0.92                      | -57.89                    |
| 8,055.00                  | 0.19               | 138.60         | 7,695.33                  | -122.34       | 1.807.24      | 1,811.15                    | 0.06                        | 0.06                       | -2.89                     |
| 8,150.00                  | 0.19               | 73.47          | 7,790.33                  | -122.41       | 1,807.50      | 1,811.41                    | 0.22                        | 0.00                       | -68.56                    |
| 8,245.00                  | 0.13               | 56.48          | 7,885.32                  | -122.31       | 1,807.74      | 1,811.65                    | 0.08                        | -0.06                      | -17.88                    |
| 8,340.00                  | 0.63               | 142.10         | 7,980.32                  | -122.66       | 1,808.15      | 1,812.08                    | 0.67                        | 0.53                       | 90.13                     |
| 8,434.00                  | 0.44               | 160.10         | 8,074.32                  | -123.41       | 1,808.59      | 1,812.55                    | 0.27                        | -0.20                      | 19.15                     |
| 8,528.00                  | 0.56               | 150.48         | 8,168.32                  | -124.15       | 1.808.94      | 1,812.94                    | 0.16                        | 0.13                       | -10.23                    |
| 8,623.00                  | 0.63               | 170.48         | 8,263.31                  | -125.06       | 1.809.26      | 1,813.30                    | 0.23                        | 0.07                       | 21.05                     |
| 8,717.00                  | 1.13               | 159.73         | 8,357.30                  | -126.44       | 1,809.66      | 1,813.78                    | 0.56                        | 0.53                       | -11.44                    |
| 8,812.00                  | 1.56               | 163.85         | 8,452.27                  | -128.56       | 1,810.35      | 1,814.57                    | 0.46                        | 0.45                       | 4.34                      |
| 8,907.00                  | 1.63               | 155.98         | 8,547.24                  | -131.04       | 1,811.26      | 1,815.61                    | 0.24                        | 0.07                       | -8.28                     |
| 9,001.00                  | 1.75               | 154.23         | 8,641.19                  | -133.55       | 1,812.42      | 1,816.91                    | 0.14                        | 0.13                       | -1.86                     |
| 9,056.00                  | 1.69               | 157.48         | 8,696.17                  | -135.06       | 1,813.10      | 1,817.66                    | 0.21                        | -0.11                      | 5.91                      |
| 9,097.00                  | 1.50               | 167.48         | 8,737.15                  | -136.14       | 1,813.45      | 1,818.06                    | 0.82                        | -0.46                      | 24.39                     |
| 9,190.00                  | 1.38               | 186.10         | 8,830.13                  | -138.44       | 1,813,59      | 1.818.33                    | 0.52                        | -0.13                      | 20.02                     |
| LAST MWI                  | SVY                |                | ,                         |               | , :=:==       | .,                          |                             | 23                         |                           |
| 9,231.00                  | 1.44               | 176.60         | 8,871.11                  | -139.45       | 1.813.57      | 1,818.36                    | 0.59                        | 0.15                       | -23.17                    |
| 9,983.00                  | 2.60               | 157.30         | 9,622.64                  | -164.62       | 1,820.71      | 1,826.79                    | 0.18                        | 0.15                       | -2.57                     |
| PROJECTI                  | ON MS SVY          |                | -                         |               | •             | •                           |                             |                            |                           |
| 10,019.00                 | 2.66               | 156.38         | 9,658.60                  | -166.14       | 1,821.36      | 1,827.52                    | 0.20                        | 0.17                       | -2.56                     |

**Survey Annotations** 

| Measured      | Vertical      | Local Coor    | dinates       |                   |
|---------------|---------------|---------------|---------------|-------------------|
| Depth<br>(ft) | Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Comment           |
| 9,231.00      | 8,871.11      | -139.45       | 1,813.57      | LAST MWD SVY      |
| 10,019.00     | 9,658.60      | -166.14       | 1,821.36      | PROJECTION MS SVY |

|             | <br>         | <br>  |  |
|-------------|--------------|-------|--|
| 0           |              |       |  |
| Checked By: | Approved By: | Date: |  |
| Onconou by. | Approved by. | Date. |  |
|             |              |       |  |

| Form 3160- 5  |
|---------------|
| (Amast, 2007) |

Do. aban

## UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED

OMB No 1004-0137 Expires. July 31, 2010

| 5 | Lease | Serial N | ٥ |
|---|-------|----------|---|
|   |       |          |   |

UTU-0461

| not use this form for proposals to drill or to re-enter an | 6. | If Indian, Allottee, or Tribe Name |
|--|----|------------------------------------|
| doned well. Use Form 3160-3 (APD) for such proposals.      |    | Ute Tribe                          |
|  | _  |                                    |

| SUBMIT IN TRIPLICATE - Other Instructions on reverse side. |   |                     |   |                   | Agreement Name and/or No    |  |  |
|--|---|---------------------|---|-------------------|-----------------------------|--|--|
| 1 Type of Well Od Well X Gas Well Other                    |   |                     |   |                   | ITU-63047A<br>I No.         |  |  |
| 2. Name of Operator  | , |                     | *************************************** | NBU               | 922-18138                   |  |  |
| Kerr-McGee Oil & Gas Ons                                   | shore, LP                               |                     |   | 9 API Well No.    |                             |  |  |
| 3a, Address  |   | 36 Phone No. (inclu | de area code)                           | 4:                | 3-047-39844                 |  |  |
| P O. Box 173779, Dei                                       | nver, CO 80217-3779                     | 720.9               | 29.6226                                 | 10. Field and Poo | l, or Exploratory Area      |  |  |
| 4. Location of Well (Footage, Sec., T.                     | , R , M , or Survey Description)        |                     |   | Natural Buttes    |                             |  |  |
| NW SE Sec 18 T 9S R 22E                                    |   |                     |   |                   | 11. County or Parish, State |  |  |
| 1470 FSL 2539  | FEL                                     |                     |   |                   | Uintah                      |  |  |
| 12. CHECK APPROI   | PRIATE BOX(S) TO INDICA                 | IE NATURE OF        | NOTICE, REPOR                           | T, OR OTHER       | DATA                        |  |  |
| TYPE OF SUBMISSION   |   | TY                  | PE OF ACTION                            |                   |                             |  |  |
| Notice of Intent   | Acidize                                 | Deepen              | Production (St                          | eri/Resume)       | Water Shut-off              |  |  |
|  | Altering Casing                         | Fracture Treat      | Reclamation                             |                   | Well Integrity              |  |  |
| X Subsequent Report  | Casing Repair                           | New Construction    | Recomplete                              |                   | X Other                     |  |  |
|  | Change Plans                            | Plug and abanden    | Temporarily Ai                          | bandon            | Surface Location            |  |  |
| Final Abandonment Notice                                   | Convert to Injection                    | Plug back           | Water Disposa                           | t                 |                             |  |  |

Kerr-McGee Oil & Gas Onshore, LP, respectfully notifies that the center stakes for the surface location have been moved to NWSE 1470' FSL & 2539' FEL. The bottomhole location has not been changed.

RECEIVED

DEC 1 5 2009

41:22101

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109. 481641

Percent Approval of this Action is Necessary



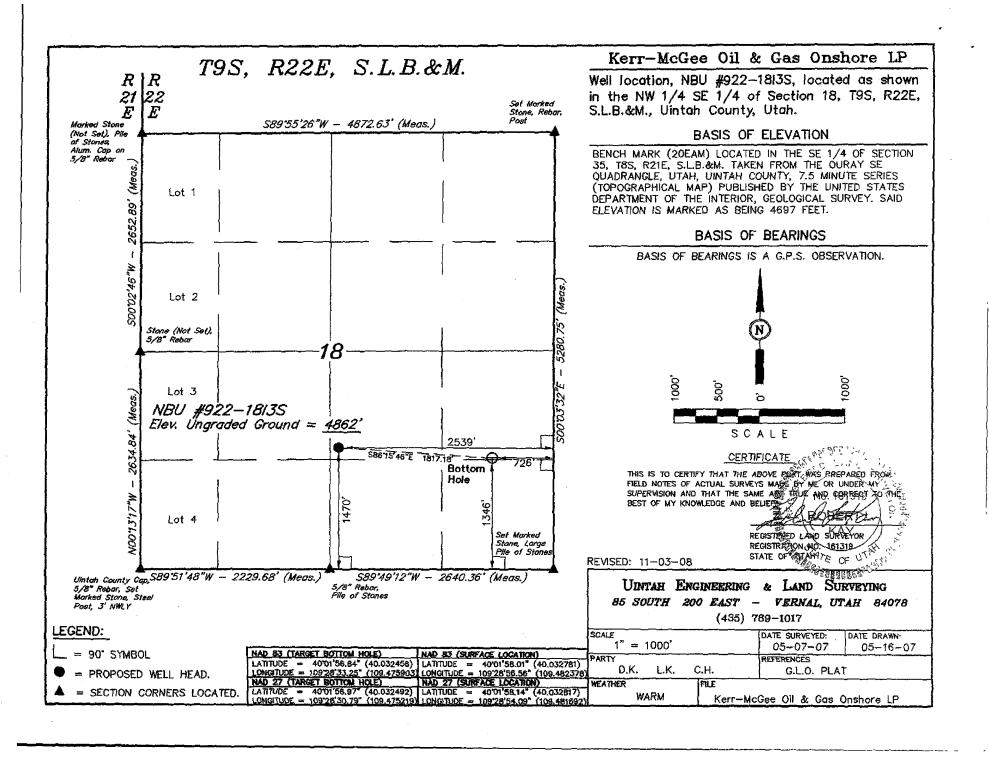
DIV. OF OIL

| GAS & MINING  |   |  |
|---|---|--|
| 14 I hareby certify that the foregoing is true and correct Name (Printed) Typed)  | [   |  |
| Kevin McIntyre  | Tatle   | Regulatory Analyst   |
| Signature / //  | Date  | 11/12/08   |
| THIS SPACE  | FOR FEDERAL OR STAT                                       | E OFFICE USE   |
| Approved by Conditions of approvel, if any are attached, Approved of this notice do   |   | Date 12-22-08  |
| Conditions of approval, if any are attached. Approval of this notice do certify that the applicant holds legal or equal ble trile to those rights in which would entitle the applicant to constant operations thereon | es not warrant of TOTAL THE The subject lease NVPRONMENTA | \" \"\\ \\ \"\\\\\\\\\\\\\\\\\\\\\\\\\                       |
| Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 1212, majorates any false, fictitiousor fraudulent statements or representations a   |   | and willfully to make any department or agency of the United |
| Gestructions on page 21   |   | HEUEIVEL -   |

NOV 17 2008

---- ON CAR MINING

<sup>13</sup> Describe Proposed or Completed Operation (clearly state all pertinent details including estimated starting date of any proposed work and approximate direction thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths or pertinent markers and sands. Attach the Bond under winoh the work will performed or provide the Bond No. on file with the BLM/BIA Required subsequent reports shall be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filled once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including replanantion, have been completed, and the operator has determined that the site is ready for final inspection.)



# Greater Natural Buttes Unit



# **NBU 922-18I3S**

RE-COMPLETIONS PROCEDURE

DATE:7/23/2010 AFE#:2047241

**COMPLETIONS ENGINEER:** Conner Staley, Denver, CO

(720)-929-6419 (Office)

SIGNATURE:

**ENGINEERING MANAGER: JEFF DUFRESNE** 

SIGNATURE:

# REMEMBER SAFETY FIRST!

Name: NBU 922-18I3S

Location: SW NE SE Sec. 18 T9S R22E

**Uintah County, UT** 

Date: 7/23/10

**ELEVATIONS:** 4861 GL 4872 KB

**TOTAL DEPTH:** 10019 **PBTD:** 9988

**SURFACE CASING:** 9 5/8", 36# J-55 ST&C @ 2763' **PRODUCTION CASING:** 4 1/2", 11.6#, I-80 LT&C @ 10012'

Marker Joint 4995-5016'

### **TUBULAR PROPERTIES:**

|                  | BURST | COLLAPSE | DRIFT DIA. | CAPACITIES |          |
|------------------|-------|----------|------------|------------|----------|
|                  | (psi) | (psi)    | (in.)      | (bbl/ft)   | (gal/ft) |
| 2 3/8" 4.7# J-55 | 7,700 | 8,100    | 1.901"     | 0.00387    | 0.1624   |
| tbg              |       |          |            |            |          |
| 4 ½" 11.6# I-80  | 7780  | 6350     | 3.875"     | 0.0155     | 0.6528   |
| (See above)      |       |          |            |            |          |
| 2 3/8" by 4 ½"   |       |          |            | 0.0101     | 0.4227   |
| Annulus          |       |          |            |            |          |

## **TOPS:**

1728' Green River

1998' Birds Nest

2340' Mahogany

4938' Wasatch

7592' Mesaverde

10019' Bottom of Mesaverde (TD)

CBL indicates good cement below 2000'

## **GENERAL**:

- A minimum of **14** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburtons Induction-Density-Neutron log dated 6/22/09
- 3 fracturing stages required for coverage.
- Procedure calls for 4 CBP's (8000 psi).
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Pump scale inhibitor at 3 gal/1000 during pad and sand ramp up to 1.25 ppg. Pump at 10 gal/1000 during flush.
- 30/50 mesh Ottawa sand, **Slickwater frac**.
- Maximum surface pressure 7000 psi.
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.

- Call flush at 0 PPG @ inline densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.
- If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing over flush stage by 5 bbls (from top perf)
- Service companies need to provide surface/production annulus pop-offs to be set for 1500 psi for each frac.
- Pump a curable resin coated sand (such as SLC) last 5,000# of all frac stages
- Tubing Currently Landed @~9449
- Originally completed on 9/15/09

# **Existing Perforations:**

|  | -         | Top, | Bot., |     |       |  |
|--|-----------|------|-------|-----|-------|--|
|  | Zone      | ft.  | ft    | SPF | Holes |  |
|  |           |      |       |     |       |  |
|  | MESAVERDE | 8204 | 8210  | 4   | 24    |  |
|  | MESAVERDE | 8294 | 8298  | 4   | 16    |  |
|  | MESAVERDE | 8356 | 8360  | 3   | 12    |  |
|  | MESAVERDE | 8408 | 8410  | 3   | 6     |  |
|  | MESAVERDE | 8476 | 8480  | 4   | 16    |  |
|  | MESAVERDE | 8552 | 8554  | 4   | 8     |  |
|  | MESAVERDE | 8626 | 8630  | 4   | 16    |  |
|  | MESAVERDE | 8828 | 8834  | 4   | 24    |  |
|  | MESAVERDE | 9052 | 9054  | 3   | 6     |  |
|  | MESAVERDE | 9084 | 9088  | 3   | 12    |  |
|  | MESAVERDE | 9190 | 9192  | 4   | 8     |  |
|  | MESAVERDE | 9254 | 9258  | 4   | 16    |  |
|  | MESAVERDE | 9488 | 9490  | 3   | 6     |  |
|  | MESAVERDE | 9580 | 9584  | 3   | 12    |  |
|  | MESAVERDE | 9624 | 9628  | 4   | 16    |  |
|  | MESAVERDE | 9652 | 9654  | 4   | 8     |  |
|  | MESAVERDE | 9776 | 9780  | 3   | 12    |  |
|  | MESAVERDE | 9844 | 9846  | 3   | 6     |  |
|  | MESAVERDE | 9902 | 9904  | 3   | 6     |  |
|  | MESAVERDE | 9966 | 9970  | 4   | 16    |  |

## **PROCEDURE:**

- 1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
- 2. TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~9449'). Visually inspect for scale and consider replacing if needed.
- 3. If tbg looks ok consider running a gauge ring to 7396 (50' below proposed CBP). Otherwise P/U a mill and C/O to 7396 (50' below proposed CBP).
- 4. Set 8000 psi CBP at ~ 7346'. Pressure test BOP and casing to 6000 psi. .
- 5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

| Zone    | From | To   | spf | # of shots |
|---------|------|------|-----|------------|
| WASATCH | 7276 | 7280 | 3   | 12         |
| WASATCH | 7310 | 7316 | 4   | 24         |

- 6. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Spot 250 gal of 15% HCl and let soak. Fracture as outlined in Stage 1 on attached listing. Underdisplace to ~7276' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 7. Set 8000 psi CBP at  $\sim 6954$ '. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

| Zone    | From | То   | spf | # of shot |
|---------|------|------|-----|-----------|
| WASATCH | 6756 | 6758 | 3   | 6         |
| WASATCH | 6784 | 6786 | 3   | 6         |
| WASATCH | 6800 | 6802 | 3   | 6         |
| WASATCH | 6848 | 6852 | 3   | 12        |
| WASATCH | 6922 | 6924 | 4   | 8         |

- 8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~6756' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 9. Set 8000 psi CBP at ~6414'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

```
Zone From To spf # of shots WASATCH 6376 6384 4 32
```

- 10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6376' flush only with recycled water.
- 11. Set 8000 psi CBP at~6326'.
- 12. TIH with 3 7/8" mill, pump off sub, SN and tubing.
- 13. Mill ALL plugs and clean out to PBTD at 9988. Land tubing at  $\pm$ 9449' pump off bit and bit sub. This well WILL be commingled at this time.
- 14. Clean out well with foam and/or swabbing unit until steady flow has been established from recomplete.

# 15. RDMO

For design questions, please call Conner Staley, Denver, CO (720)-929-6419 (Office)

For field implementation questions, please call Jeff Samuels Vernal, UT 435-781-9770 (Office)

NOTES:

Name NBU 922-1813S Perforation and CBP Summary

|       |                  | Perfo   | rations    |     |       |                   |       |        |  |  |
|-------|------------------|---------|------------|-----|-------|-------------------|-------|--------|--|--|
| Stage | Zones            | Top, ft | Bottom, ft | SPF | Holes | Fracture Coverage |       |        |  |  |
|       |                  |         |            |     |       |                   |       |        |  |  |
| 1     | WASATCH          | 7276    | 7280       | 3   |       | 7264.5            | to    | 7282   |  |  |
|       | WASATCH          | 7310    | 7316       | 4   | 24    | 7300              | to    | 7325   |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       |                  |         |            |     | Look  |                   |       |        |  |  |
|       | # of Perfs/stage |         |            |     | 36    | CBP DEPTH         | 6,954 |        |  |  |
|       |                  |         |            | _   | _     |                   |       |        |  |  |
| 2     | 2 WASATCH        | 6756    | 6758       | 3   |       | 6753.5            | to    | 6761   |  |  |
|       | WASATCH          | 6784    | 6786       | 3   |       | 6783              | to    | 6787.5 |  |  |
|       | WASATCH          | 6800    | 6802       | 3   |       | 6795.5            | to    | 6808   |  |  |
|       | WASATCH          | 6848    | 6852       | 3   |       | 6838              | to    | 6843   |  |  |
|       | WASATCH          | 6922    | 6924       | 4   | 8     | 6844.5            | to    | 6855.5 |  |  |
|       | WASATCH          |         |            |     |       | 6920.5            | to    | 6926   |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       |                  |         |            |     | Look  |                   |       |        |  |  |
|       | # of Perfs/stage |         |            |     | 38    | CBP DEPTH         | 6,414 |        |  |  |
|       |                  |         |            |     |       |                   |       |        |  |  |
| 3     | WASATCH          | 6376    | 6384       | 4   | 32    | 6368              | to    | 6390.5 |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       | WASATCH          |         |            |     |       |                   |       |        |  |  |
|       |                  |         |            |     | Look  |                   |       |        |  |  |
|       | # of Perfs/stage |         |            |     | 32    | CBP DEPTH         | 6,326 |        |  |  |
|       |                  |         |            |     |       |                   |       |        |  |  |
|       |                  |         |            |     |       |                   |       |        |  |  |
|       | Totals           |         |            |     | 106   |                   |       |        |  |  |

| Perfect   Page   Production Log   Prod   | cturing S | chedules |          |           |            |       |        |                      |         |       |                  | Swabbing Days  | 0       | <b>Enter Numb</b> | er of swabbir | ig days h | ere for rec | completes  |           |                |       |
|--|-----------|----------|----------|-----------|------------|-------|--------|----------------------|---------|-------|------------------|----------------|---------|-------------------|---------------|-----------|-------------|------------|-----------|----------------|-------|
| Perfs   V   Perf   |           |          |          |           |            | 1     |        | Recomplete?          | Y       | 1     |                  | Production Log |         |                   |               |           |             |            |           |                |       |
| Perfs  |           |          | Co       | py to new | book       |       |        |                      |         | 1     |                  |                |         |                   |               |           | •           |            |           |                |       |
| Perfs  |           | 1100     |          |           |            |       |        |                      |         |       |                  | UTI            |         | Citter Hamb       | er or britis  |           |             |            |           |                |       |
| ## Zone  |           | 1        |          |           | T          |       |        |                      |         |       |                  |                |         |                   |               |           |             |            | I         |                | Sca   |
| Total  |           |          | Pe       | rfs       | 4          |       | Rate   | Fluid                | Initial | Final | Fluid            | Volume         | Cum Vol | Volume            | Cum Vol       |           | Sand        | Sand       | Cum. Sand | Footage from   | Inhib |
| MACATCH   MACA   | e         | Zone     | Top, ft. | Bot., f   | SPF        | Holes | BPM    | Туре                 | ppg     | ppg   |                  | gals           | gals    | BBLs              | BBLs          |           | % of frac   | lbs        | lbs       | CBP to Flush   | gal.  |
| MASATCH   7310   7316   4   24   5 0   SIP and 5 mm ISDF   | 4 have    | DATON    | 7070     | 720       | ,          |       | Voried | Ouron in tour        |         |       | Olistonates      |                | 0       |                   | 0             |           |             |            |           |                |       |
| MASATCH   MASA   |           |          |          |           |            |       |        |                      |         |       | Slickwater       |                |         | "                 | ľ             |           |             |            |           |                | 45    |
| MASATCH   MASA   |           |          | 7310     | 731       | ١ '        |       |        |                      |         |       | district control | 44.400         | 44.400  | 274               | 274           | 15.00     | 0.00        |            |           |                |       |
| MASATCH   MASA   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            |           |                |       |
| MASATCH   MASA   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            |           |                |       |
| MASATCH   MASA   | WA:       | SATCH    |          |           |            |       |        |                      | 1.5     | 3     |                  |                |         |                   |               | 35.0%     | 64.3%       | 59,850     |           |                | 0     |
| WASATCH   WASA   | WA:       | SATCH    |          |           |            |       | 50     | Flush (4-1/2)        |         |       | Slickwater       | 4,750          | 80,750  | 113               | 1,923         |           |             |            | 93,100    |                | 0     |
| MASATCH   MASA   | WA        | SATCH    |          |           |            |       |        | ISDP and 5 min ISDF  |         |       | Slickwater       |                |         |                   |               |           |             |            |           |                | 0     |
| MASATCH   MASA   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            |           |                | 0     |
| WASATCH   WASA   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            | 93 100    |                | Ö     |
| ## of Pertivatage   100k   36   38   5   5   5   5   5   5   5   5   5   |           |          |          |           |            |       |        |                      |         |       |                  |                | 80.750  | 113               | 1 923         |           |             |            |           |                | 45    |
| Cook   Section   |           |          |          |           |            |       |        |                      |         |       |                  |                | 00,100  | 1                 | 1,020         |           |             |            |           |                |       |
| Second Column   Second Colum   | ****      | SMI OH   |          |           |            | Look  |        |                      |         |       |                  |                |         |                   |               |           | national fr | 40,000     | 49,000    | the cand/md 6  | 20    |
| WASATCH   6756   6758   3   6   Varied   Varie   |           |          |          | # -f D    |            |       |        |                      |         |       |                  |                |         | _                 | luch denth    | 7276      |             |            |           |                |       |
| 2  |           |          |          | # OT P'EI | nsstage    | ,     |        | cc About summer time | Fortish |       |                  |                |         | Г                 | iusii depui   | 1210      |             | CBF depui  | 0,504     | 322            |       |
| VASATCH   6000   6000   500   50   50   50   50  | 2 14/6    | PATCH    | 6766     | 676       | 0 1        |       |        |                      | (min)   |       | Olislauster      |                | 0       | 0                 | 0             |           |             |            |           |                |       |
| MASATCH   6020   6020   3   6   5   5   5   5   5   5   5   5   5  |           |          |          |           |            |       |        |                      |         |       | SICKHALEI        |                |         | ۰                 | ľ             |           |             |            |           |                |       |
| WASATCH   6892   6924   4   8   50   Silckwater Ramp   0.25   1.5   Silckwater Ramp   1.5   3   Silckwater Ramp   1.5   3   Silckwater Ramp   0.25   1.5   Silckwater Ramp   0.25   1.5   Silckwater Ramp   0.25   1.5   Silckwater Ramp   0.25   1.5   Silckwater Ramp   0.25   1.7   Silckwater Ramp   0.25   1.7   Silckwater Ramp   0.25   1.7   Silckwater Ramp   0.25   Sil   |           |          |          |           |            |       |        |                      |         |       | ar i             | 40.000         | 40.220  | 244               | 244           |           |             |            |           |                | - 0   |
| WASATCH   WASA   |           |          |          |           |            |       |        |                      | 0.05    | 4.5   |                  |                |         |                   |               |           |             |            |           |                |       |
| Substitution   Subs   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            |           |                |       |
| SDP and 5 min ISDF   Silckwater   T2,660   105   1,730   33,606   4   105   1,730   34,6   4,640 regump time (min)   1,740   1,750     |           |          | 6922     | 692       | 4 4        | 1     |        |                      | 1.5     | 3     |                  |                |         |                   |               | 35.0%     | 64.3%       | 53,747     |           |                |       |
| Totals   Total   Tot   |           |          |          |           |            |       | 50     |                      |         |       |                  | 4,410          | 72,660  | 105               | 1,730         |           |             |            | 83,606    |                |       |
| Totals   Total   Tot   | WA:       | SATCH    |          |           |            |       |        | ISDP and 5 min ISDP  |         |       | Slickwater       |                |         |                   |               |           |             |            |           |                | 0     |
| WASATCH   WASA   | WA        | SATCH    |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            |           |                | 0     |
| WASATCH   WASA   | WA;       | SATCH    |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            | 83,606    |                | 0     |
| # of Perfevitage   Dook 38   Second 19   Sickwater   S |           |          |          |           |            |       |        |                      |         |       |                  |                | 72,660  | 105               | 1,730         |           |             |            |           |                | 4     |
| Solicionate   Particular   Pa   | WA:       | SATCH    |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            |           |                | 17    |
| 34.6   37.6   6384   4   32   Varied Pumpin test    |           |          |          |           |            | Look  |        |                      |         |       |                  |                |         |                   |               |           | gal/md-ft   | 75,000     | 91,875    | lbs sand/md-ft |       |
| 3 WASATCH   6376   6384   4   32   VARIED   Pump-in test   |           |          |          | # of Per  | rfs/stage  | 3     | В      |                      |         |       |                  |                |         | F                 | ush depth     | 6756      | (           | CBP depth  | 6,414     | 342            |       |
| WASATCH   WASA   |           |          |          |           |            |       | 34.6   | << Above pump time   | (min)   |       |                  |                |         |                   |               |           |             |            |           |                |       |
| MASATCH   MASA   |           |          | 6376     | 638       | 4 4        | 3     |        |                      |         |       | Slickwater       |                | 0       | 0                 | 0             |           |             |            |           |                |       |
| WASATCH   WASA   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            |           |                |       |
| VASATCH   SO   Sickwater Ramp   1.5   Sickwater   28,000   80,000   687   1,905   35.0%   64.3%   83,000   98,000   60   | WA        | SATCH    |          |           |            |       | 50     | Slickwater Pad       |         |       | Slickwater       | 12,000         | 12,000  | 286               | 286           | 15.0%     | 0.0%        | 0          | 0         |                | 36    |
| VASATCH   VASA   | WA:       | SATCH    |          |           |            |       | 50     | Slickwater Ramp      | 0.25    | 1.5   | Slickwater       | 40,000         | 52,000  | 952               | 1,238         | 50.0%     | 35.7%       | 35,000     | 35,000    |                | 12    |
| WASATCH   S0   Flush (4-1/2)   Slickwater   4,162   84,162   99   2,004   98,000   0.000   | WA        | SATCH    |          |           |            |       |        |                      |         | 3     | Slickwater       | 28,000         | 80,000  | 667               | 1,905         | 35.0%     | 64,3%       | 63,000     | 98,000    |                | 0     |
| SDP and 5 min ISDF   Slickwater   WASATCH   Usok   First depth   5.376   CBP depth   5.326   Uso sand/met   CBP depth      |           |          |          |           |            |       |        |                      |         |       | Slickwater       |                |         |                   |               |           |             | 1          |           |                | 0     |
| WASATCH   WASA   |           |          |          |           |            |       | "      |                      |         |       |                  | .,,,,,,,       | 21,102  |                   | 2,00          |           |             |            | 1 20,000  |                | Č     |
| WASATCH   WASA   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            | 1         |                | ò     |
| Section   Sect   |           |          |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            | 98,000    |                |       |
| WASATCH   Look   State   Look   St   |           |          |          |           |            |       |        |                      |         |       |                  |                | 94.100  | - 00              | 2.004         |           |             |            | 90,000    |                |       |
| Look   Look   Look     Flush depth   6376   CBP depth   6,326   Look   CBP depth     |           |          |          |           |            |       |        |                      |         |       |                  |                | 04,102  | 99                | 2,004         |           |             |            |           |                |       |
| # of Perfectage 32   Flush depth   6,326   50    Totals   106   Total Fluid   237,572   gals   5,656   bits   Total Sand   274,706   | WA.       | SATCH    |          |           |            |       |        |                      |         |       |                  |                |         |                   |               |           |             |            | 64.050    |                | 15    |
| 40.1   << Above pump time (min)  |           |          |          | # of Po-  | of close a |       | ,      |                      |         |       |                  |                |         | -                 | luch danth    | 6376      |             |            |           |                |       |
| Total Fluid 237,572 gals 5,656 bits Total Sand 274,706   |           |          |          | # 01 1'81 | ins stage  | 3     |        | cc About name time   | (min)   |       |                  |                |         |                   | iusti deptri  | 03/6      | · '         | l aebtu    | 0,320     | 30             |       |
| 5,656 bbls   | Tot       | tals     |          |           |            | 10    |        | Above pump time      | from)   |       |                  | Total Fluid    | 237,572 | gals              | 5,656         | bbls      |             | Total Sand | 274,706   |                |       |
|  |           |          |          |           | 1          |       |        |                      |         |       |                  |                | 5,656   | bbls              |               |           |             |            |           |                |       |

| Do not use this form for proposition bottom-hole depth, reenter plu DRILL form for such proposals.  1. TYPE OF WELL Gas Well  2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI  3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S  4. LOCATION OF WELL |  | N WELLS  sting wells below current  APPLICATION FOR PERMIT TO                               | 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461  6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE  7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES  8. WELL NAME and NUMBER: NBU 922-1813S  9. API NUMBER: 43047398440000  9. FIELD and POOL or WILDCAT: NATURAL BUTTES  COUNTY: |
|--|--|---|---|
| FOOTAGES AT SURFACE:<br>1470 FSL 2539 FEL<br>QTR/QTR, SECTION, TOWNSHI<br>Qtr/Qtr: NWSE Section: 18  | IATURE OF NOTICE, REPORT,  | STATE: UTAH  OR OTHER DATA  |   |
| TYPE OF SUBMISSION   |  | TYPE OF ACTION  |   |
| THE OPERATOR REQ<br>WELL LOCATION. THE<br>FORMATION. THE O<br>THE NEWLY WASATCH  | CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF | OMPLETE THE SUBJECT DMPLETE THE WASATCH ATION TO COMMINGLE DE FORMATION. PLEAS N PROCEDURE. | Accepted by the Utah Division of E Oil, Gas and Mining The: August 19, 2010   |
| NAME (PLEASE PRINT) Danielle Piernot   | <b>PHONE NUMBER</b><br>720 929-6156  | TITLE<br>Regulatory Analyst   |   |
| SIGNATURE<br>N/A   |  | <b>DATE</b> 8/3/2010  |   |



# The Utah Division of Oil, Gas, and Mining

- State of UtahDepartment of Natural Resources

**Electronic Permitting System - Sundry Notices** 

**Sundry Conditions of Approval Well Number 43047398440000** Authorization: Board Cause No. 173-14.

> Appropried by the **Utah Division of** Oil, Gas and Mining

Sundry Number: 17012 API Well Number: 43047398440000

|  |  |   | g  |
|--|--|---|--|
|  | STATE OF UTAH  |   | FORM 9   |
|  | DEPARTMENT OF NATURAL RESOURCE<br>DIVISION OF OIL, GAS, AND MIN  |   | 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461          |
| SUNDF  | RY NOTICES AND REPORTS   | ON WELLS  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>UTE             |
|  | sals to drill new wells, significantly deepen<br>ugged wells, or to drill horizontal laterals. U   |   | 7.UNIT or CA AGREEMENT NAME:<br>NATURAL BUTTES           |
| 1. TYPE OF WELL<br>Gas Well  |  |   | 8. WELL NAME and NUMBER:<br>NBU 922-18I3S                |
| 2. NAME OF OPERATOR:<br>KERR-MCGEE OIL & GAS ONS                           | HORE, L.P.   |   | <b>9. API NUMBER:</b> 43047398440000                     |
| <b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S                 | PHOI<br>Street, Suite 600, Denver, CO, 80217 3779  | NE NUMBER: 720 929-6515 Ext   | 9. FIELD and POOL or WILDCAT:<br>NATURAL BUTTES          |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1470 FSL 2539 FEL           |  |   | COUNTY:<br>UINTAH  |
| QTR/QTR, SECTION, TOWNSHI  | IP, RANGE, MERIDIAN:<br>Township: 09.0S Range: 22.0E Meridian:   | S   | STATE:<br>UTAH   |
| 11. CHE  | CK APPROPRIATE BOXES TO INDICAT  | E NATURE OF NOTICE, REPORT,   | OR OTHER DATA  |
| TYPE OF SUBMISSION   |  | TYPE OF ACTION  |  |
| THE OPERATOR HAS THE OPERATOR H OPERATOR HAS CO WITH THE EXISTIN PLACED ON | CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  ✓ PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF  WILDCAT WELL DETERMINATION  DAMPLETED OPERATIONS. Clearly show all performed and performed | N ON THE SUBJECT WELL.  ATCH FORMATION. THE  ATCH FORMATION ALONG  THE SUBJECT WELL WAS UN  AT 12:30 PM. THE  OIL  MITTED WITH THE VELO | Accepted by the<br>Utah Division of<br>J. Gas and Mining |
|  |  |   |  |
| NAME (PLEASE PRINT)<br>Sheila Wopsock                                      | <b>PHONE NUMBER</b> 435 781-7024   | TITLE<br>Regulatory Analyst   |  |
| SIGNATURE<br>N/A   |  | <b>DATE</b> 7/27/2011   |  |

Form 3160-4 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

WELL COMPLETION OF RECOMPLETION DEPORT AND

|  | ***                                     | COMIT                 | EIION                      | א אבנ                               | OWIPLE                                      | HON                                     | KEPU                | KIAN                     | ID LO                                 | G                          |  |   | ease Serial<br>JTU461                  | No.                                     |  |
|--|---|-----------------------|----------------------------|-------------------------------------|---|---|---------------------|--------------------------|---------------------------------------|----------------------------|--|---|--|---|--|
| la. Type o   | of Well Completion                      | Oil Well              | ☑ Gas<br>Vew Well          | Well (                              |   | Other                                   |                     | Plug Bac                 | ck 5                                  | Diff, R                    | esvr.  | 6. If                                   | Indian, Al                             | lottee o                                | r Tribe Name   |
| A 37   | 60.                                     | Othe                  | er                         |                                     |   |   | -                   | J                        |                                       |                            |  | 7. U                                    | nit or CA A<br>JTU63047                | Agreem<br>A                             | ent Name and No.   |
|  | MĆGREE (                                |                       | SONSHOR                    | <b>E</b> Mail: an                   | Contac<br>drew.lytle(                       | t: ANDF<br>@anada                       | REW LY<br>rko.com   | TLE                      |                                       |                            |  |   | ease Name<br>IBU 922-1                 |   | ell No.  |
|  | P.O. BOX<br>DENVER                      | l, CO 802             |                            |                                     |   | - 1                                     | 3a. Phon<br>Ph: 720 | -929-61                  |                                       | ea code)                   | )  | 9. A                                    | PI Well No                             | ),                                      | 049<br>43-074-39844  |
| 4. Location  | n of Well (Re                           | eport locati          | ion clearly ar             | nd in acco                          | rdance with                                 | Federal                                 | requirem            | ents)*                   |                                       |                            | · · · · · · · · · · · · · · · · · · ·            | 10. 1                                   | Field and P                            | ool, or l                               | Exploratory  |
| At surfa   | ace NWS                                 | E 1470FS              | L 2539FEL                  | 40.03274                            | 40 N Lat, 1                                 | 09.4818                                 | 340 W L             | on                       |                                       |                            |  |   | IATURAL<br>Sec., T., R.,               |   | Block and Survey   |
| At top p   | prod interval                           | reported b            | elow SES                   | E 1384F                             | SL 732FE                                    | L                                       |                     |                          |                                       |                            | :  | 0                                       | r Area Se                              | c 18 T                                  | 9S R22E Mer SLB  |
|  |   | SE 1304F              | SL 718FEL                  | _                                   |   |   |                     |                          | EARLAND                               |                            |  |   | County or P<br>IINTAH                  | 'arish                                  | 13. State<br>UT  |
| 14. Date Spudded 12/16/2008 15. Date T.D. Reached 06/21/2009 16. Date Completed 17. Elevations (DF, KB, RT 07/26/2011 17. Elevations (DF, KB, RT 0 |   |                       |                            |                                     |   |   |                     |                          |                                       | 3, RT, GL)*                |  |   |  |   |  |
| 18. Total I  |   | MD<br>TVD             | 10019<br>9659              |                                     | 9. Plug Ba                                  |   | MI<br>TV            |                          | 9989<br>9629                          |                            | 20. Dep  | th Bri                                  | dge Plug So                            |   | MD<br>TVD  |
| 21. Type E<br>BHV-A  | Electric & Otl<br>CTR-SDL-E             | her Mecha<br>DSN-CLR  | nical Logs R<br>-TRIPLE CO | un (Subm<br>DMBO                    |   |   | Logo                | <b>√</b>                 | .22                                   | Was I                      | well cored<br>OST run?<br>tional Sur             |   | 🔀 No                                   | Yes                                     | (Submit analysis)<br>(Submit analysis)<br>(Submit analysis)  |
| 23. Casing a   | nd Liner Rec                            | ord (Repo             | ort all strings            | set in wei                          | 1)  |   |                     |                          |                                       |                            |  |   |  | 23 100                                  | (Succession and Succession and Succe |
| Hole Size  | Size/C                                  | Grade                 | Wt. (#/ft.)                | Top<br>(MD)                         | Botto<br>(MI                                |   | ge Ceme<br>Depth    | 4                        | No. of Sl<br>ype of C                 |                            | Slurry<br>(BB)                                   |   | Cement 7                               | Гор*                                    | Amount Pulled  |
| 20.000   | -                                       | .000 STL              | 36.7                       |                                     |   | 40                                      |                     |                          |                                       | 28                         |  | -                                       |  |   |  |
| 12.250<br>7.875  |   | 625 J-55<br>.500 I-80 |                            |                                     |   | 763                                     |                     |                          | ·                                     | 680                        |  | ~                                       |  | 0                                       |  |
| 7.073  | 4                                       | .500 1-60             | 11.6                       | ļ                                   |   | 012                                     |                     |                          | -                                     | 1935                       |  |   |  | 1040                                    |  |
|  |   |                       |                            |                                     |   |   |                     |                          |                                       | ·                          |  |   |  |   |  |
| Charles and the same party of  |   |                       |                            |                                     |   |   |                     |                          | -                                     |                            |  |   |  |   |  |
| 24. Tubing   | -                                       | (D)   D               |                            | a =>                                | - T   |   |                     | T                        |                                       |                            |  | 7                                       |  |   |  |
| 2.375  | Depth Set (N                            | 9450                  | acker Depth                | (MD)                                | Size ]                                      | Depth Se                                | t (MD)              | Packe                    | r Depth                               | (MD)                       | Size   | De                                      | pth Set (MI                            | D)   1                                  | Packer Depth (MD)  |
| THE RESERVE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON NAME | ing Intervals                           | 0.001                 |                            | L-                                  | <u>-</u>                                    | 26. Per                                 | foration F          | Record                   |                                       | 1                          |  |   | ************************************** |   |  |
| F  | ormation                                |                       | Тор                        |                                     | Bottom                                      |   | Perfora             | ited Inter               | val                                   |                            | Size   | N                                       | lo. Holes                              |   | Perf. Status   |
| <u>A)</u>  | WAS                                     | ATCH                  |                            | 6378                                | 7524  | ~~~                                     |                     | 63                       | 78 TO 7                               | 7524                       | 0.36   |   |  | OPEN                                    |  |
| B)<br>C)   |   |                       |                            | w                                   | ****  |   |                     |                          |                                       |                            | <del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del> |   |  |   |  |
| D)   |   |                       | W. A                       |                                     |   |   |                     |                          |                                       |                            |  | _                                       |  |   |  |
|  | racture, Trea                           | tment, Cer            | nent Squeeze               | , Etc.                              |   |   |                     |                          |                                       |                            | **************************************           |   |  |   |  |
|  | Depth Interv                            | al                    |                            |                                     |   |   |                     | Amoun                    | t and Ty                              | pe of M                    | aterial  | **********                              | RF(                                    | FI                                      | VFD  |
| ***************************************  | 63                                      | 378 TO 75             | 524 PUMP 2                 | 654 BBLS                            | SLICK H2C                                   | <b>&amp;</b> 78,04                      | 4# SAND             |                          | · · · · · · · · · · · · · · · · · · · | ***************            |  |   |  |   |  |
|  | *************************************** | <del>/</del>          |                            |                                     | THE RESERVE OF THE PERSON NAMED IN COLUMN 1 | *************************************** |                     | ·                        |                                       |                            |  | Calculation of the                      | SEF                                    | 0.7                                     | _2011  |
|  |   |                       | ···                        | · <del>Contract of the Market</del> |   |   |                     |                          | **********                            |                            |  |   |  |   |  |
|  | ion - Interval                          | l A                   |                            |                                     |   |   |                     |                          |                                       | ingenier in der einer eine | 40.41 A  | <del>D</del>                            | IV. OF O                               | L, GAS                                  | S & MINING   |
| Date First<br>Produced<br>07/26/2011   | Test<br>Date<br>08/14/2011              | Hours<br>Tested<br>24 | Test<br>Production         | Oil<br>BBL<br>28.0                  | Gas<br>MCF<br>1691.0                        | Water<br>BBL                            |                     | oil Gravity<br>Corr. API |                                       | Gas<br>Gravity             | P  | roductio                                | on Method                              | ·                                       |  |
| Choke  | Tbg. Press.                             | Csg.                  | 24 Hr.                     | Oil                                 | Gas   | Water                                   |                     | as:Oil                   |                                       | Well Sta                   | itus   |   | FLOW                                   | SFRO                                    | M WELL   |
| Size<br>64/64  | Flwg. 181<br>SI                         | Press.<br>791.0       | Rate                       | BBL<br>28                           | MCF<br>1691                                 | BBL                                     | 24 R                | atio                     |                                       | Pr                         | ЭW   |   |  |   |  |
| 28a. Produc  | ction - Interva                         |                       |                            |                                     |   |   | <u> </u>            |                          |                                       |                            |  | *************************************** | <del></del>                            |   |  |
| Date First<br>Produced   | Test<br>Date                            | Hours<br>Tested       | Test<br>Production         | Oil<br>BBL                          | Gas<br>MCF                                  | Water<br>BBL                            |                     | il Gravity<br>orr. API   |                                       | Gas<br>Gravity             | P  | roductio                                | n Method                               | <del></del>                             |  |
| Choke<br>Size  | Tbg. Press.<br>Flwg.<br>SI              | Csg.<br>Press.        | 24 Hr.<br>Rate             | Oil<br>BBL                          | Gas<br>MCF                                  | Water<br>BBL                            |                     | as:Oil<br>atio           |                                       | Well Sta                   | tus  |   |  | *************************************** |  |
| /~ ·   | <u> </u>                                |                       |                            |                                     |   |   |                     |                          |                                       |                            | ***************************************          |   |  |   |  |

| Date First Produced Date Test Hours Tested Production BBL MCF BBL Oil Gravity Corr. API Gravity Production Method  Choke Tbg. Press. Cgg. 24 Hr. Oil BBL MCF BBL Ratio  28c. Production - Interval D  Date First Produced Date Tested Production Oil BBL MCF BBL Oil Gravity Corr. API Gravity  Tog. Press. Cgg. 24 Hr. Oil Gravity Ratio  Date First Produced Date Tested Production Oil BBL MCF BBL Oil Gravity Gravity  Choke Tbg. Press. Cgg. 24 Hr. Oil Gas Water Date Tested Production Method Produced Date Tested Production BBL MCF BBL Oil Gravity Gravity  Choke Tbg. Press. Cgg. 24 Hr. Oil Gas Water BBL Ratio  Disposition of Gas(Sold, used for fuel, vented, etc.)  Sol.D  30. Summary of Porous Zones (Include Aquifers):  Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  | 28b. Prod                     | luction - Inter | val C                  |                                 |                               | Maria de la composition della  |  |                                       | to Militario V. |            |                  |                   |                    |
|--|-------------------------------|-----------------|------------------------|---------------------------------|-------------------------------|--|--|---------------------------------------|-----------------|------------|------------------|-------------------|--------------------|
| Social Contents   Total Production   Social Contents   Total Contents      | Date First                    | Test            | Hours                  |                                 |                               |  |  | Oil Gravity                           | G               | as         | Production Metho | d                 |                    |
| Size   Prog.   | Produced                      | Date            | Tested                 | Production                      | BBL                           | MCF  | BBL                                      | Corr. API                             |                 |            |                  | -                 |                    |
| Double   Total   Tot   |                               | Fiwg.           |                        |                                 |                               |  |  |                                       | W               | eil Status | <del></del>      |                   |                    |
| Date   Touristic   Product   Produ   | 28c. Prod                     | luction - Inter | val D                  | ×                               |                               |  |  | · · · · · · · · · · · · · · · · · · · | L               |            |                  |                   |                    |
| Size   Flags   Pees   Bate   IBBL   MCF   BBL   Bate   |                               |                 |                        |                                 |                               |  |  |                                       |                 |            | Production Metho | d                 |                    |
| SOLD  30. Summary of Porous Zones (Include Aquifers):  Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recovering the state of t |                               | Flwg.           |                        |                                 |                               |  |  |                                       | w               | ell Status |                  |                   |                    |
| Show all important zones of porosity and contents thereof: Cored intervals and all drill-sterm tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Formation Top Bottom Descriptions, Contents, etc. Name Tomess  Formation Top Bottom Descriptions, Contents, etc. Name Tomess  GREEN RIVER 1685 BIRD'S NEST 1886 BIRD'S NEST 1886 MAHCGANY 2572 7959 10019  32. Additional remarks (include plugging procedure): Attached is the recompletion chrono and the Wasatch perforation report.  33. Circle enclosed attackments:  1. Electrical/Mechanical Logs (1 full set req'd.) 2. Geologic Report 3. DST Report 4. Directional Surva 5. Sundry Notice for plugging and cement verification 6. Core Analysis 7 Other:  34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):  Electroid Submission #11689 Verified by the BLM Wall Information System.  For KERR MCGREE OIL & GAS ONSHORE, sea to the Vernal  Name (please print) ANDREW LYTLE  Title REGULATORY ANALYST   | 29. Dispo<br>SOLI             | sition of Gas   | (Sold, used            | l for fuel, ven                 | ted, etc.)                    |  |  |                                       |                 |            |                  |                   |                    |
| tests, including depth interval tested, cushion used, time tool open, flowing and shur-in pressures and recoveries.  Formation Top Bottom Descriptions, Contents, etc. Name Towns 1685 BIRD'S NIEST 1685 BIRD'S NI | 30. Sumn                      | nary of Porou   | s Zones (I             | nclude Aquif                    | ers):                         | College of the Colleg |  |                                       | ****            | 31. For    | rmation (Log) N  | 1arkers           |                    |
| GREEN RIVER BIRD'S NEST 1885 BIRD'S NEST 1886 MAHOGANY 2512 WASATCH 5270 7959 10019  32. Additional remarks (include plugging procedure): Attached is the recompletion chrono and the Wasatch perforation report.  33. Circle enclosed attachments:  1. Electrical/Mechanical Logs (I full set req'd.) 2. Geologic Report 3. DST Report 4. Directional Survo 5. Sundry Notice for plugging and attached information is complete and correct as determined from all available records (see attached instructions):  Electronic Submission #116699 Verified by the BLM Well Information System. For KERR MCGREE OIL & GAS ONSHORE, sent to the Vernal  Name (please print) ANDREW LYTLE  Title REGULATORY ANALLYST   | tests,                        | including dep   | zones of poth interval | oorosity and o<br>tested, cushi | contents ther<br>on used, tim | eof: Corec<br>e tool ope   | d intervals and all<br>n, flowing and sh | drill-stem<br>ut-in pressur           | res             |            |                  |                   |                    |
| GREEN RIVER 1685 BIRD'S NEST 2512 WASATCH 5270 7959 10019  32. Additional remarks (include plugging procedure): Attached is the recompletion chrono and the Wasatch perforation report.  33. Circle enclosed attachments:  1. Electrical/Mechanical Logs (1 full set req'd.) 2. Geologic Report 3. DST Report 4. Directional Surve 5. Sundry Notice for plugging and cement verification 6. Core Analysis 7 Other:  34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):  Electronic Submission #116689 Verified by the BLM Well Information System. For KERR MCGREE OIL & GAS ONSHORE,, sent to the Vernal  Name (please print) ANDREW LYTLE  Title REGULATORY ANALYST  |                               | Formation       |                        | Тор                             | Bottom                        |  | Descriptions                             | , Contents, et                        | tc.             |            | Name             |                   | Top<br>Meas. Depti |
| Attached is the recompletion chrono and the Wasatch perforation report.  33. Circle enclosed attachments:  1. Electrical/Mechanical Logs (1 full set req'd.)  2. Geologic Report  3. DST Report  4. Directional Survey  5. Sundry Notice for plugging and cement verification  6. Core Analysis  7 Other:  34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):  Electronic Submission #116689 Verified by the BLM Well Information System.  For KERR MCGREE OIL & GAS ONSHORE, sent to the Vernal  Name (please print) ANDREW LYTLE  Title REGULATORY ANALYST   | BIRD'S NI<br>MAHOGA<br>WASATC | EST<br>NY<br>H  |                        | 1886<br>2512<br>5270            |                               |  |  |                                       |                 |            |                  |                   |                    |
| 5. Sundry Notice for plugging and cement verification 6. Core Analysis 7 Other:  34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):  Electronic Submission #116689 Verified by the BLM Well Information System.  For KERR MCGREE OIL & GAS ONSHORE, sent to the Vernal  Name (please print) ANDREW LYTLE  Title REGULATORY ANALYST   | Attac                         | hed is the re   | ecompletio             | olugging proc<br>on chrono ar   | edure):<br>nd the Was         | atch perfo   | oration report.                          |                                       |                 |            |                  |                   |                    |
| 5. Sundry Notice for plugging and cement verification 6. Core Analysis 7 Other:  34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):  Electronic Submission #116689 Verified by the BLM Well Information System.  For KERR MCGREE OIL & GAS ONSHORE, sent to the Vernal  Name (please print) ANDREW LYTLE  Title REGULATORY ANALYST   | 1. Ele                        | ectrical/Mech   | anical Log             | s (1 full set re                | eq'd.)                        |  | 2. Geologic Re                           | port                                  |                 | 3. DST Rep | ort              | 4. Direction      | nal Survev         |
| Electronic Submission #116689 Verified by the BLM Well Information System.  For KERR MCGREE OIL & GAS ONSHORE, sent to the Vernal  Name (please print) ANDREW LYTLE  Title REGULATORY ANALYST  | 5. Su                         | ndry Notice f   | or pluggin             | g and cement                    | verification                  |  | 6. Core Analys                           | is                                    |                 |            |                  |                   |                    |
| Name (please print) ANDREW LYTLE Title REGULATORY ANALYST  | 34. I here                    | by certify tha  | t the foreg            |                                 | ronic Subm                    | ission #11   | 6689 Verified by                         | the BLM V                             | Vell Info       | mation Sys |                  | ached instruction | ons):              |
|  | Name                          | (please print)  | ) ANDRE                | W LYTLE                         | Z OI MEMA                     | . IVECURE  | E OIL & GAS                              |                                       |                 |            | ALYST            |                   |                    |
| Date 09/01/2011  |                               |                 |                        |                                 | ion)                          | A Maria andreasy and paper which   |  | -                                     |                 |            |                  |                   |                    |
|  | Signal                        | uit             | (⊏iectroi              | iic Sudmiss                     | ion)                          |  |  | Date <u>C</u>                         | )9/01/201       | 11         |                  |                   |                    |

|                           |                    |                  |          | perat                     | ion S       | umm | REGION<br>nary Repor |   |  |  |  |
|---------------------------|--------------------|------------------|----------|---------------------------|-------------|-----|----------------------|---|--|--|--|
|                           | -1813S ( BLUE****) |                  | Spud Co  | onductor                  | : 12/16/2   | 800 | Spud Date: 2/        | 23/2009   |  |  |  |
| Project: UTAH-            | UINTAH             |                  | Site: NB | U 922-1                   | 8K PAD      |     |                      | Rig Name No: GWS 1/1  |  |  |  |
|                           | IPL/RESEREVEAD     |                  | Start Da |                           |             |     |                      | End Date: 8/11/2011   |  |  |  |
| Active Datum: F<br>Level) | Sea                | UWI: N           | IW/SE/0/ | 1,470.00/E/0/2,539.00/0/0 |             |     |                      |   |  |  |  |
| Date                      | Time<br>Start-End  | Duration<br>(hr) | Phase    | Code                      | Sub<br>Code | P/U | MD From<br>(ft)      | Operation   |  |  |  |
| 7/13/2011                 | 9:00 -             |                  | COMP     | 30                        | A           | P   |                      | 10 AM [DAY 1] JSA @ 7AM ON PREVIOS WELL.  R/U RIG. FCP=85#, FTP=85#. BLEW WELL DN. KILL TBG W/ 30 BBLS. NDWH, NUBOP. R/U FLOOR & TBG EQUIPMENT.UNLAND TBG. L/D HANGER. NO SCALE IN HANGER. PULLING 80K OFF BTM.  MIRU SCAN TECH. POOH SCANNING TBG & L/D YELL BND TBG ON SILLS ON LOCATION. L/D 3 JTS RED BND W/ UP TO 48% WALL LOSS. PMPD ANOTHER 30 BBLS DN TBG TO GET OUT OF HOLE WITH TBG. TOTAL OF 60 BBLS PMPD. XN & BUMBER SPRING ALMOST PLUGGED OFF W/ WHITE/GRAY SCALE. BTM 10 JTS SHOWED LIGHT OD SCALE. NORM READING OF 20-130 ON TBG. LIGHT SCALE ID OFF & ON THRU OUT STRING. ALL WAS DRIFTED W/ 1.90 DRIFT. |  |  |  |
| 7/14/2011                 | 7:00 - 10:00       | 3.00             | COMP     | 30                        |             | P   |                      | 6 PM SWI-SDFN. PREP TO RIH W/ CBP IN AM. 7AM [DAY 2] JSA SETTING PLUGS, NDBOP, NUFV, R/D & R/U RIG.  SICP=750#. BLEW WELL DOWN.  MIRU CASED HOLE SOLUTIONS. RIH W/ HALL 10K CBP & SET @ 7554'. RDMO CASED HOLE SOLUTIONS. NDBOP, NUFV. FILL CSG W/ 110 BBLS TMAC. P.T. TO 1000#. LOST 0# IN HR. R/D RIG. MOVE OVER TO NEXT RECOMPLETE ON PAD.   |  |  |  |
| 7/15/2011                 | 12:00 - 3:00       |                  | COMP     | 33                        | С           | Р   |                      | PREP TO FRAC NEXT WEEK. RU B & C QUICK TEST FILL SURFACE & CSG TEST CSG & FRAC VALVES TO 1000 PSI FOR 15 MIN LOST 9 PSI TEST CSG & FRAC VALVES TO 3500 PSI FOR 15 MIN LOST 35 PSI TEST CSG & FRAC VALVES TO 6200 PSI FOR 30 MIN LOST 63 PSI   |  |  |  |

#### US ROCKIES REGION **Operation Summary Report** Well: NBU 922-18/3S (BLUE\*\*\*\*) Spud Conductor: 12/16/2008 Spud Date: 2/23/2009 Project: UTAH-UINTAH Site: NBU 922-18K PAD Rig Name No: GWS 1/1 Event: RECOMPL/RESEREVEADD Start Date: 7/12/2011 End Date: 8/11/2011 UWI: NW/SE/0/9/S/22/E/18/0/0/6/PM/S/1,470.00/E/0/2,539.00/0/0 Active Datum: RKB @4,887.00ft (above Mean Sea Level) Date Time Duration MD From Phase Code Sub P/U Operation Start-End (hr) Code (ft) 7/20/2011 7:00 - 18:00 11.00 COMP 36 P В PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH & PERF AS PER PERF DESIGN. POOH.X-OVER FOR FRAC CREW FRAC STG 1)WHP 140 PSI, BRK 2122 PSI @ 4.5 BPM. ISIP 1414 PSI, FG .63 PUMP 100 BBLS @ 49.7 BPM @ 4860 PSI = 87% HOLES OPEN. ISIP 1714 PSI, FG .67, NPI 300 PSI. MP 5465 PSI, MR 50.9 BPM, AP 4599 PSI, AR 50.3 PMP 1170 BBLS SW & 33,752 LBS OF 30/50 SND NO RESIN SND. TOTAL PROP 33,752 LBS PERF STG 2)PU 4 1/2 HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6988' P/U PERF AS PER PERF DESIGN. POOH. XO-VER FOR FRAC CREW FRAC STG 2)WHP 315 PSI, BRK 2183 PSI @ 4.5 BPM. ISIP 1401 PSI, FG .64 PUMP 100 BBLS @ 50.3 BPM @ 3592 PSI = 100% HOLES OPEN. ISIP 1336 PSI, FG .63, NPI -65 PSI. MP 4307 PSI, MR 50.9 BPM, AP 3697 PSI, AR 50.4 врм, PMP 659 BBLS SW & 18,810 LBS OF 30/50 SND & NO RESIN SND.TOTAL PROP 18,810 LBS X-OVER FOR W L PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6414' P/U PERF AS PER PERF DESIGN. POOH X-OVER FOR FRAC CREW FRAC STG 3)WHP 305 PSI, BRK 1750 PSI @ 4.2 BPM. ISIP 1241 PSI, FG .63 PUMP 100 BBLS @ 42.5 BPM @ 3916 PSI = 72% HOLES OPEN. ISIP 1536 PSI, FG .50.4, NPI 295 PSI. MP 5574 PSI, MR 50.4 BPM, AP 5129 PSI, AR 47.3 PMP 825 BBLS SW & 25,482 LBS OF 30/50 SND & NO RESIN SND.TOTAL PROP 25,482 LBS X-OVER TO W L PU & RIH W 4 1/2 CBP SET KILL PLUG @ 6338 POOH RD W L SWI TOTAL SAND = 78.044#

TOTAL CLFL = 2654 TOTAL SCALE = 304 GAL TOTAL BIO = 57 GAL

8/17/2011

3:35:25PM

#### US ROCKIES REGION **Operation Summary Report** Well: NBU 922-18I3S (BLUE\*\*\*\*) Spud Conductor: 12/16/2008 Spud Date: 2/23/2009 Project: UTAH-UINTAH Site: NBU 922-18K PAD Rig Name No: GWS 1/1 Event: RECOMPL/RESEREVEADD Start Date: 7/12/2011 End Date: 8/11/2011 Active Datum: RKB @4,887.00ft (above Mean Sea UWI: NW/SE/0/9/S/22/E/18/0/0/6/PM/S/1,470.00/E/0/2,539.00/0/0 Level) Date Time Duration Phase Sub P/U Code MD From Operation Start-End (hr) Code (ft) 7/25/2011 7:00 - 17:00 10.00 COMP P 30 7AM [DAY 6] JSA-- P/U TBG, DRLG PLUGS, FOAM Α UNIT, LANDING TBG, NDBOP, NUWH. MIRU LAST FRIDAY, P/U 3-7/8" FLOW TECH MILL. PMP OPEN SUB, XN NIPPLE, 2-3/8" L-80 YELL BND TBG & RIH. [SLM & DRIFTED] FLUSH TBG EVERY 500' W/ RIG PMP. TAG SAND @ 6318'. R/U SWVL & RIG PUMP. ESTABLISH CIRCULATION. P.T. BOP TO 3000#. LOST 0# IN 15 MIN. C/O 10' SAND TO CBP#1. FOAM UNIT ON STD-BY. [DRLG CBP#1] @ 6328'. D/O HALL 8K CBP IN 10 MIN. 0# INC. RIH & C/O 30' SAND TO CBP#2. FCP=0-50#. [DRLG CBP#2] @ 6414'. D/O HALL 8K CBP IN 4 MIN. 0# INC. RIH & C/O 30' SAND TO CBP#3. FCP= 0-50#. [DRLG CBP#3] @ 6988'. D/O HALL 8K CBP IN 4 MIN. 0# INC. RIH, TAG SAND @ 7475'. C/O 60' SAND TO 7535'. [ISOLATION PLUG @ 7554] B.P. @ 7524'. CIRCULATE WELL CLN. POOH & L/S 10 JTS ON SILLS ON LOCATION. LAND TBG ON HANGER W/ 228 JTS 2-3/8" YELL BND L-80 TBG. EOT @ 7233.51', PMP OPEN SUB W/ XN @ 7231.31'. R/D FLOOR & TBG EQUIPMENT, NDBOP, NUWH, DROP BALL DN TBG & PMP OPEN THE SUB @ 1300#. OPEN WELL TO FBT ON OPEN CHOKE, FTP=0#, SICP=50#, HAD WTFRD AIR / NITROGEN UNIT BLOW WELL AROUND. UNLOAD 250 BBLS WATER. R/D WTFRD FOAM UNIT. R/D RIG. MOVE OVER & R/U ON NBU 922-18O3AS. NDWH, NUBOP. R/U FLOOR & TBG EQUIPMENT. PREP TO P/U TBG & DRILL PLUGS IN AM. 5PM RIG SDFN 6:30 PM TURN WELL OVER TO APC MAINT TEAM & DELSCO FBC. PROBLEM WITH PROD SEPERATOR & WELL STRUGGLING TO PRODUCE. MAY HAVE TO SHUT IN TO BUILD PSI. CREW TROUBLE SHOOTING CONTROLS ON PROD SEPERATOR. LTR=2084 BBLS. 295 JTS ON LOCATION SILLS AT BEGINING OF DAY. 228 JTS LANDED 67 JTS ON LOCATION SILLS. 7:00 -7/26/2011 33 Α 7 AM FLBK REPORT: CP 1350#, TP 0#, OPEN/64" CK, 0 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 740 **BBLS LEFT TO RECOVER: 1914** 7/27/2011 7:00 33 7 AM FLBK REPORT: CP 1250#, TP 750#, 20/64" Α CK, 5 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 929 **BBLS LEFT TO RECOVER: 1725**

# US ROCKIES REGION

| Vell: NBU 922-18i3S ( BLUE****) Spud Conductor: 12/16/2008 Spud Date: 2/23/2009 |      |                   |                  |                 |                |             |           |  |  |  |  |
|---|------|-------------------|------------------|-----------------|----------------|-------------|-----------|--|--|--|--|
|   |      | `                 |                  | <del>-, -</del> |                |             |           | Spud Date: 2/23/2009   |  |  |  |
| Project: UTAH-  |      |                   |                  |                 | SU 922-1       |             |           | Rig Name No: GWS 1/1   |  |  |  |
| Event: RECOM  |      |                   |                  |                 | te: 7/12/      |             |           | End Date: 8/11/2011  |  |  |  |
| Active Datum: I<br>Level)   | ·    | ,                 |                  | Sea             | UWI: N         | IW/SE/0     | /9/S/22/E | /18/0/0/6/PM/S/1,470.00/E/0/2,539.00/0/0   |  |  |  |
| Date  | St   | Time<br>art-End   | Duration<br>(hr) | Phase           | Code           | Sub<br>Code | P/U       | MD From Operation (ft)   |  |  |  |
| 7/28/2011<br>8/10/2011  |      | - 7:15<br>- 17:00 | 0.25<br>9.75     | COMP<br>COMP    | 33<br>48<br>31 | A<br>I      | P<br>P    | 7 AM FLBK REPORT: CP 800#, TP 550#, 20/64" CK<br>5 BWPH, LIGHT SAND, - GAS<br>TTL BBLS RECOVERED: 1049<br>BBLS LEFT TO RECOVER: 1605<br>HSM, SLIPS, TRIPS & FALLS, TRIPPING TBG.<br>MIRU, SPOT EQUIP, HOOK UP FLOWLINE TO FBT  |  |  |  |
|   |      |                   |                  |                 |                |             |           | INSTAL 2 WH CAGES, CONTROL WELL, OPEN CSG TO PRODUCTION TANK & PUMP 25 BBLS DOWN TBG, ND WH, NU BOP, RU FLOOR & TBG EQUIP, INSTAL STRIPPING RUBBER, SPOT TBG TRAILER, PUMP 20 BBLS DOWN CSG, UNLAND TBG & POOH 37 STDS TBG & CSG STARTED BLOWING PUMP 20 BBLS DOWN TBG & 25 BBLS DOWN CSG, C/O STRIPPING RUBBER, POOH 67 STDS TBG & CSG STARTED BLOWING AGAIN PUMP 10 BBLS DOWN TBG & 10 BBLS DOWN CSG LEFT TRICKLE GOING DOWN CSG 40 BBLS POOH L/D BTM JT, XN SN & PUMP OPEN ALL GAULDED, RERUN MILL, NEW POBS & XN SN, RIH, WILL D/O ISOLATION PLUG IN AM, SWI, SDFN.  |  |  |  |
| 8/11/2011   | 7:00 | - 7:15            | 0.25             | COMP            | 48             |             | Р         | HSM, SLIPS, TRIPS & FALLS, D/O ISOLATION PLUG.   |  |  |  |
|   | 7:15 | - 18:00           | 10.75            | СОМР            | 44             | С           | P         | RU P/S, MIRU TECH FOAM INSTAL STRING FLOAT & BREAK CIRC W/ AIR FOAM, C/O SAND FROM 7,415' TO 7,554', P/S HOSE CAME APART HAD TO REPAIR, D/O ISOLATION PLUG @ 7,554' TOOK 100 PSI KICK, KILL AIR FOAM IN TBG W/ 15 BBLS TMAC, SET P/S BACK, POOH 5 JTS REMOVE STRING FLOAT, PU TBG TAG @ 9,455' L/D 5 JTS (NO DRIFT), WASHED OUT TEE GOING TO FBT HAD TO C/O, PU P/S & INSTAL STRING FLOAT, C/O FROM 9,455' TO 9,500', PU TBG TAG @ 9,940' C/O TO 9,983' ON TOP OF OLD POBS 13' PAST BTM PERF W/ 315 JTS L-80 TBG, PBTD @ 9,988' & BTM PERF @ 9,970'. CIRC W/ AIR FOAM TO CLEAN HOLE FOR 40 MIN, KILL TBG W/ 20 BBLS TMAC TO PULL STRING FLOAT, LD 17 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 298 JTS 2 3/8" L-80, EOT 9,450.22'.  RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF BIT W/ AIR FOAM UNIT PRESS TO 2,000 PSI PUT RIG |  |  |  |
|   |      |                   |                  |                 |                |             |           | PUMP ON WENT TO 4,000 PSI BIT NO GO, BLED PRESS OFF TO GET AIR OUT OFF TBG, USED RIG PUMP BIT WENT OFF @ 2,600 PSI.  SWI TO BUILD PRESS OVERNIGHT, WILL RD & MOVE TO NBU 922-18L PAD IN AM.  KB= 26' 4 1/16" FMC HANGER= .83' 292 JTS 2 3/8" L-80 = 9,421.19' USED 3 JTS NEW L-80 POBS= 2.20' EOT @ 9,450.22'  |  |  |  |
|   |      |                   |                  |                 |                |             |           | CALLED CDC TALKED TO CAGON   |  |  |  |

# 1 General

# 1.1 Customer Information

| Company        | US ROCKIES REGION |
|----------------|-------------------|
| Representative |                   |
| Address        |                   |

# 1.2 Well Information

| Well         | NBU 922-1813S ( BLUE****)                  |                 |  |  |
|--------------|--|-----------------|--|--|
| Common Name  | NBU 922-18I3S                              |                 |  | Marian                                 |
| Well Name    | NBU 922-1813S                              | Wellbore No.    | ОН                                     | •                                      |
| Report No.   | 1  | Report Date     | 7/12/2011                              |  |
| Project      | UTAH-UINTAH                                | Site            | NBU 922-18K PAD                        |  |
| Rig Name/No. |  | Event           | RECOMPL/RESEREVEADD                    |  |
| Start Date   | 7/12/2011                                  | End Date        | 8/11/2011                              | —————————————————————————————————————— |
| Spud Date    | 2/23/2009                                  | Active Datum    | RKB @4,887.00ft (above Mean Sea Level) |  |
| UWI          | NW/SE/0/9/S/22/E/18/0/0/6/PM/S/1,470.00/E/ | /0/2,539.00/0/0 |  |  |

# 1.3 General

| Contractor          |                   | Job Method      | PERFORATE | Supervisor |  |
|---------------------|-------------------|-----------------|-----------|------------|--|
| Perforated Assembly | PRODUCTION CASING | Conveyed Method | WIRELINE  |            |  |

# 1.4 Initial Conditions

# 1.5 Summary

| Fluid Type        |         | Fluid Density      | Gross Interval   | 6,378.0 (ft)-7,524.0 (ft) | Start Date/Time          | 7/18/2011 | 12:00AM    |
|-------------------|---------|--------------------|------------------|---------------------------|--------------------------|-----------|------------|
| Surface Press     |         | Estimate Res Press | No. of intervals | 9                         | End Date/Time            | 7/18/2011 | 12:00AM    |
| TVD Fluid Top     |         | Fluid Head         | Total Shots      | 69                        | Net Perforation Interval |           | 21.00 (ft) |
| Hydrostatic Press |         | Press Difference   | Avg Shot Density | 3.29 (shot/ft)            | Final Surface Pressure   |           |            |
| Balance Cond      | NEUTRAL |                    |                  |                           | Final Press Date         |           | ·          |

# 2 Intervals

# 2.1 Perforated Interval

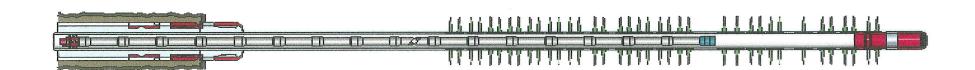
|                 | ft) S (ft) (ft) D | Shot Misfires/<br>Density Add. Shot<br>shot/ft) | Diamete Carr Type /Car<br>r<br>(in) | r Manuf Carr F<br>Size<br>(in) | Phasing Charge Desc /Charge (°) Manufacturer | Charge Reason Misrun<br>Weight<br>(gram) |
|-----------------|-------------------|---|-------------------------------------|--------------------------------|--|--|
| 12:00AMWASATCH/ | 6,378.0 6,384.0   | 4.00  | 0.360 EXP/                          | 3.375                          | 90.00  | 23.00 PRODUCTIO<br>N                     |

# 2.1 Perforated Interval (Continued)

| Date            | Formation/<br>Reservoir                               | CCL@<br>(ft) | CCL-T<br>S<br>(ft)   | MD Top<br>(ft) |         | Shot<br>Density<br>(shot/ft) | Misfires/<br>Add. Shot |       | Carr Type /Carr Manuf | Carr<br>Size<br>(in) | Phasing<br>(°) | Charge Desc /Charge<br>Manufacturer | Charge<br>Weight<br>(gram) | Reason         | Misrun |
|-----------------|---|--------------|----------------------|----------------|---------|------------------------------|------------------------|-------|-----------------------|----------------------|----------------|-------------------------------------|----------------------------|----------------|--------|
| 12:00AM         | WASATCH/  |              | (11)                 | 6,755.0        |         | -                            |                        | -     | EXP/                  | 3.375                | 120.00         |                                     | 23.00                      | PRODUCTIO<br>N |        |
| 12:00AM         | WASATCH/  |              |                      | 6,800.0        | 6,802.0 | 3.00                         |                        | 0.360 | EXP/                  | 3.375                | 120.00         |                                     | 23.00                      | PRODUCTIO<br>N |        |
| 12:00AM         | WASATCH/  |              |                      | 6,849.0        | 6,851.0 | 3.00                         |                        | 0.360 | EXP/                  | 3.375                | 120.00         | *                                   | 23.00                      | PRODUCTIO<br>N |        |
| 12:00AM         | WASATCH/  |              |                      | 6,922.0        | 6,923.0 | 3.00                         |                        | 0.360 | EXP/                  | 3.375                | 120.00         |                                     | 23.00                      | PRODUCTIO<br>N |        |
| 12:00AMWASATCH/ |   |              |                      | 6,957.0        | 6,958.0 | 3.00                         |                        | 0.360 | EXP/                  | 3.375                | 120.00         |                                     | 23.00                      | PRODUCTIO<br>N |        |
| 12:00AMWASATCH/ |   |              |                      | 7,277.0        | 7,278.0 | 3.00                         |                        | 0.360 | EXP/                  | 3.375                | 120.00         |                                     | 23.00 PRODUCTIO<br>N       |                |        |
| 12:00AM         | WASATCH/  |              |                      | 7,310.0        | 7,314.0 | 3.00                         |                        | 0.360 | EXP/                  | 3.375                | 120.00         |                                     | 23.00 PRODUCTIO<br>N       |                |        |
| 12:00AM         | VASATCH/ 7,522.0 7,524.0 3.00 0.360 EXP/ 3.375 120.00 |              | 23.00 PRODUCTIO<br>N |                |         |                              |                        |       |                       |                      |                |                                     |                            |                |        |

# 3 Plots

## 3.1 Wellbore Schematic



OnonMollo